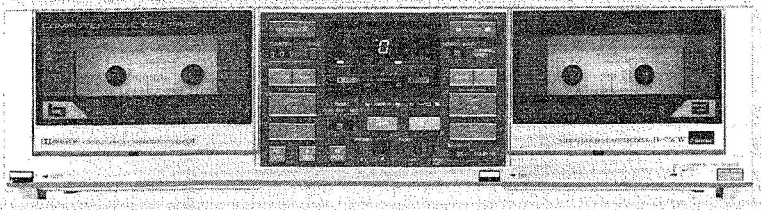
SERVICE MANUAL

STEREO DOUBLE CASSETTE DECK

SANSUI D-75CW

(Silver & Black Model)



CAUTION

1. Parts identified by the ⚠ symbol on the schematic diagram and the parts list are critical for safety. Use only replacement parts that have critical characteristics recommended by the manufacturer.
2. Make leakage-current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit before returning the appliance to the customer.

Sansui

SANSUI ELECTRIC CO., LTD.

•SPECIFICATIONS

Track format ..... 4-track/2-channel system
Tape speed ..... 4.8 cm/sec.,
9.5 cm/sec.
Heads
Rec/play head ..... HIGH-Bs hard permalloy
Play head ..... HIGH-Bs hard permalloy
Erase head ..... Double-grap HIGH-Bs ferrite
Motor ..... Electronically controlled DC motor × 2
Reels: DC Motor × 2
Wow/flutter ..... 0.06% max (WRMS)
Fast forwarding (rewinding) time
..... Approx. 85 sec. (for C-60 tape)
Frequency response (—20 VU recording/playback)
Normal tape (LH) ..... 20 to 15,000 Hz
(30 to 14,000 Hz ± 3 dB)
Chrome Tape ..... 20 to 16,000 Hz
(30 to 15,000 Hz ± 3 dB)
Metal Tape ..... 20 to 17,000 Hz
(30 to 16,000 Hz ± 3 dB)
Erasure rate (metal tape)
..... 70 dB min (1 kHz)
Recording bias frequency
..... 85 kHz
Input sensitivity/impedance
LINE IN (REC) ..... 150 mV/47 kohms
Signal to noise ratio (Record/Playback)
Metal Tape (without Dolby Noise Reduction)
..... better than 54 dB
(With Dolby Noise Reduction Effect)
DOLBY "B" NR .... better than 64 dB
(above 5 kHz)
DOLBY "C" NR .... better than 74 dB
(above 1 kHz)
Power requirements
Power voltage ..... 120/220/240V (50/60 Hz)
For U.S.A. and Canada
..... 120V (60 Hz)
Power consumption .... 21 watts
Dimensions ..... 430 mm (16-15/16″) W
112 mm (4-7/16″) H
221 mm (8-3/4″) D
Weight ..... 4.2 kg (9.3 lbs) net

* Design and specifications subject to changes without notice for improvements.
* Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation.
"Dolby" and the double D symbol are trade marks of Dolby Laboratories Licensing Corporation.

CAUTION

1. The symbols, UL, CSA, SA, BS, UK, EU, AS, XX <EXPORT> and XX-V <EXPORT(V)> on the parts list and the schematic diagram mean followings respectively.

UL	Manufactured for U.S.A market. (Underwriters Laboratories approved model.)
CSA	Manufactured for Canadian market.
SA	Manufactured for South African market.
BS, UK	Manufactured for United Kingdom market.
EU	Manufactured for European market.
AS	Manufactured for Australian market.
XX <EXPORT>	Standard Version with Inner Voltage Selector.
XX-V <EXPORT(V)>	Standard Version with Outer Voltage Selector.
NON MARK	Common Parts.

2. Some printed circuit boards are not supplied as the assembled. To separate these in this service manual, the stock No's are not indicated at the ends of the board names. However, the individual parts on the circuit boards are provided by orders.

3. Since some of capacitors and resistors are omitted from parts lists in this service manual, refer to the Common Parts List for capacitors & resistors, which was issued on February 1983.

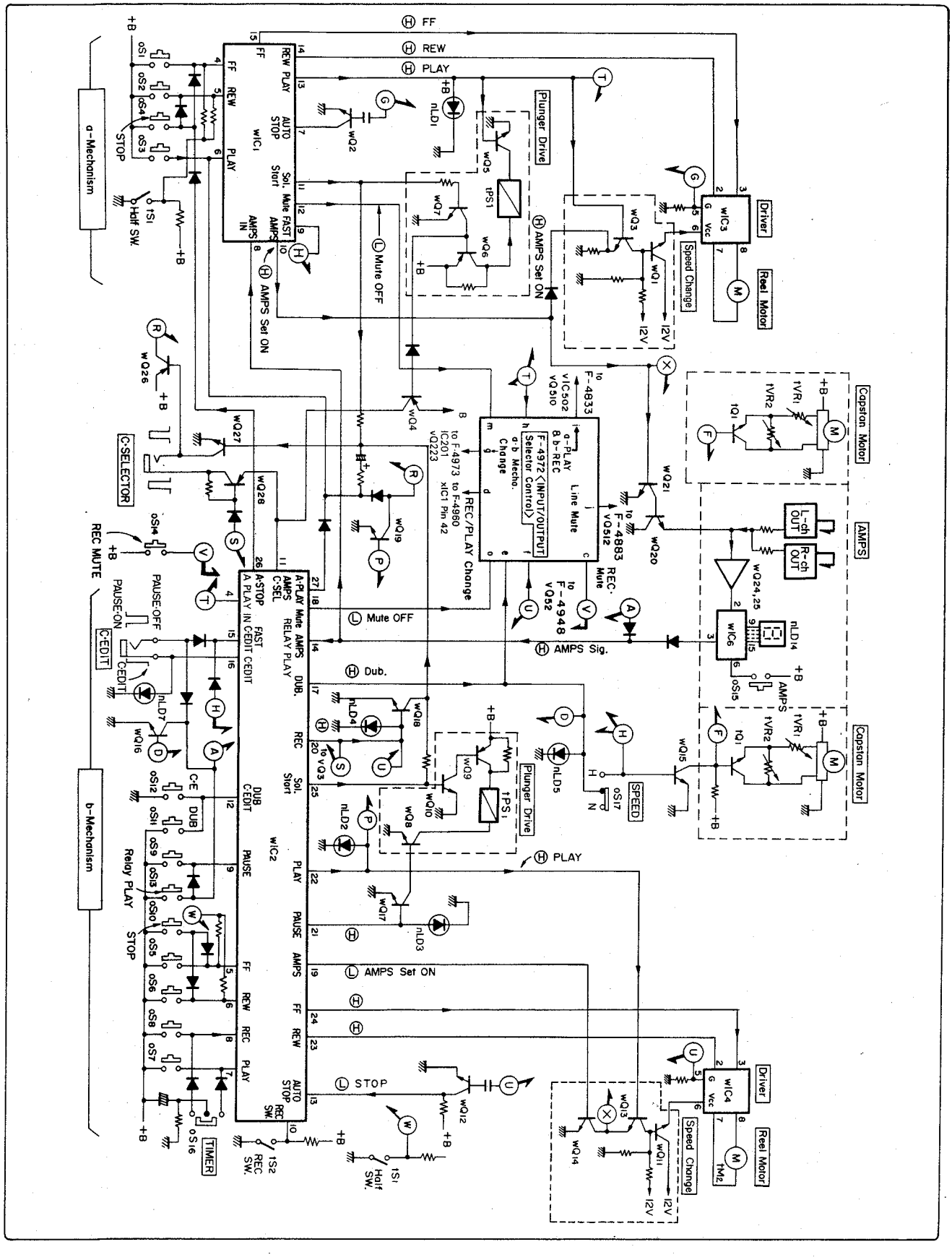
4. Abbreviations in this service manual are as follows.

•Abbreviations List

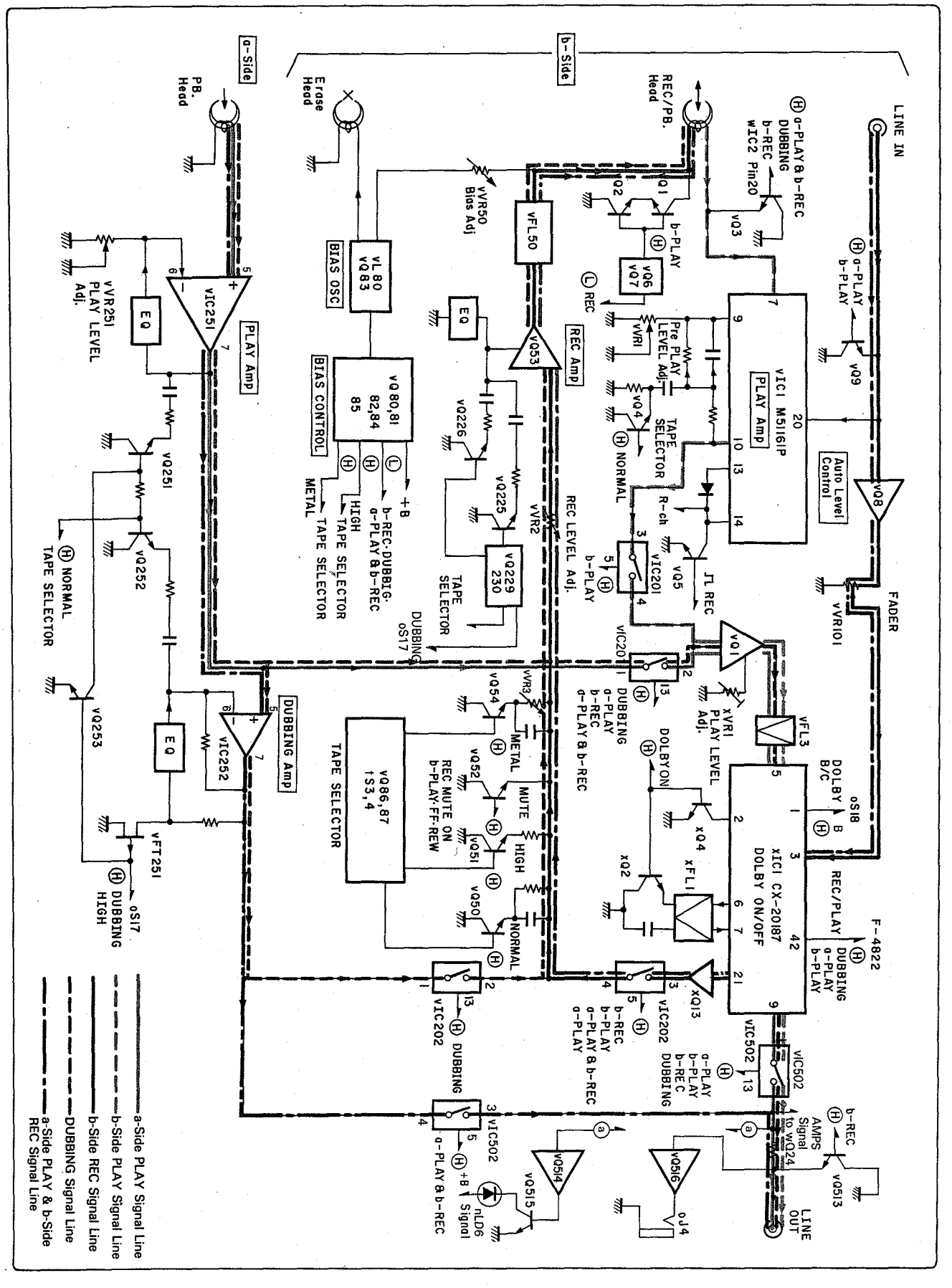
C.R.	: Carbon Resistor	E.B.L.	: Low Leak Bi-Polar Electrolytic Capacitor
S.R.	: Solid Resistor	Ta.C.	: Tantalum Capacitor
Ce.R.	: Cement Resistor	F.C.	: Film Capacitor
M.R.	: Metal Film Resistor	M.P.	: Metalized Paper Capacitor
F.R.	: Fusing Resistor	P.C.	: Polystyrene Capacitor
N.I.R.	: Non-Inflammable Resistor	G.C.	: Gimmic Capacitor
A.R.	: Array Resistor	A.C.	: Array Capacitor
C.C.	: Ceramic Capacitor	V.R.	: Variable Resistor
C.T.	: Ceramic Capacitor, Temperature Compensation	S.V.R.	: Semi Variable Resistor
E.C.	: Electrolytic Capacitor	SW.	: Switch
E.L.	: Low Leak Electrolytic Capacitor	Chip R.	: Chip Resistor
E.B.	: Bi-Polar Electrolytic Capacitor	Chip C.	: Chip Capacitor

1. BLOCK DIAGRAM

1-1. Logic Control Section

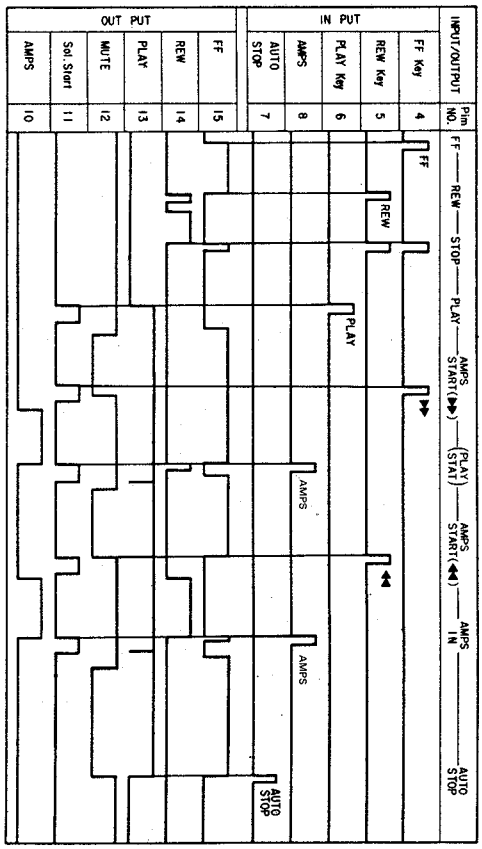


1-2. REC & PLAY Amplifier Section

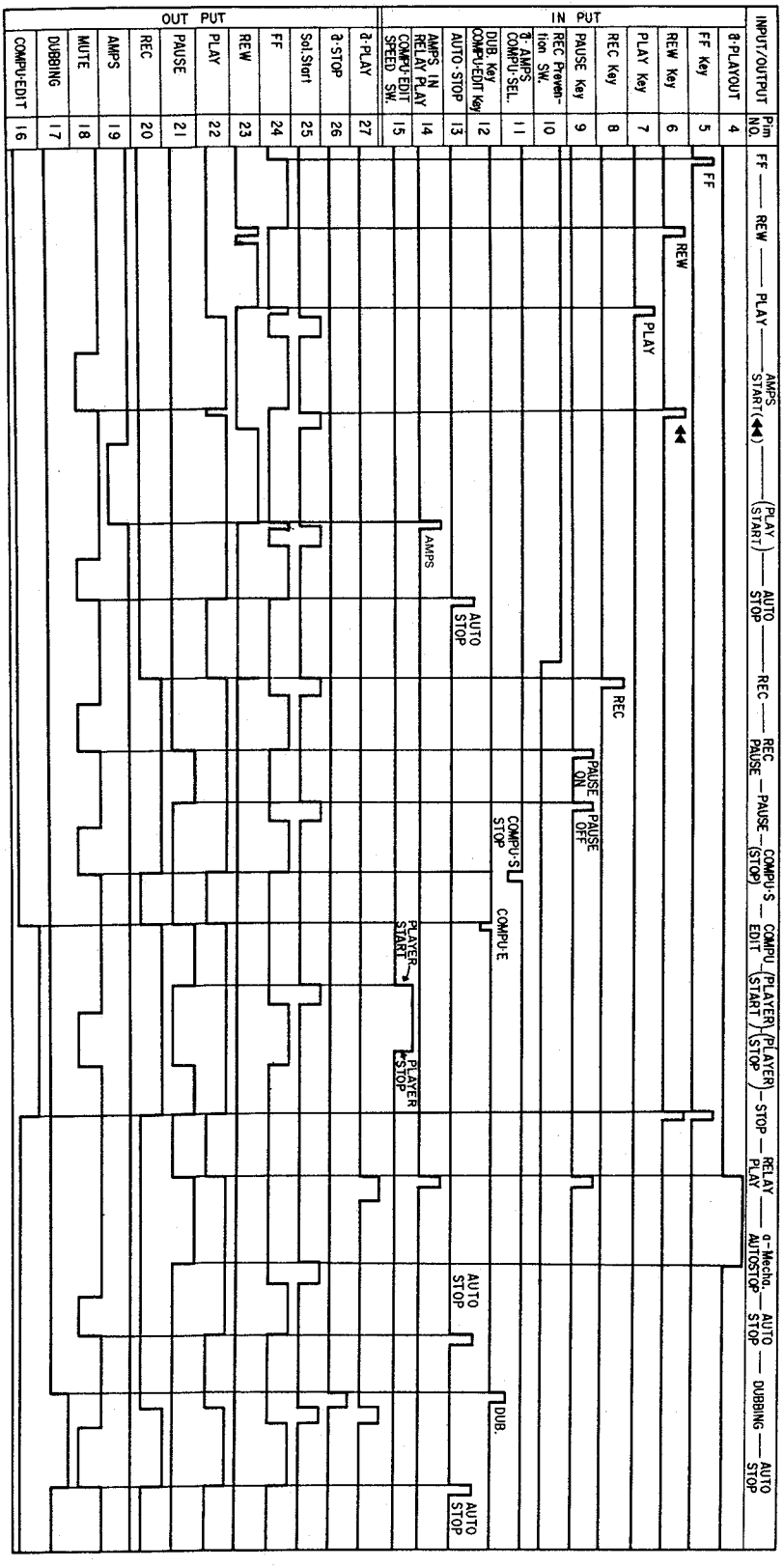


2. TIMING CHART OF IC (TC9310N-055 & TC9305P-010)

•a-Mecha. Control IC (TC9305P-010, wIC1) Timing chart

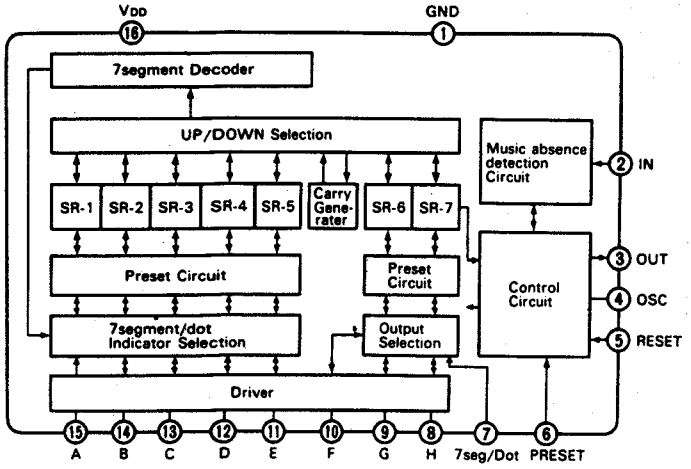


•b-Mecha. Control IC (TC9310N-055, wIC2) Timing chart

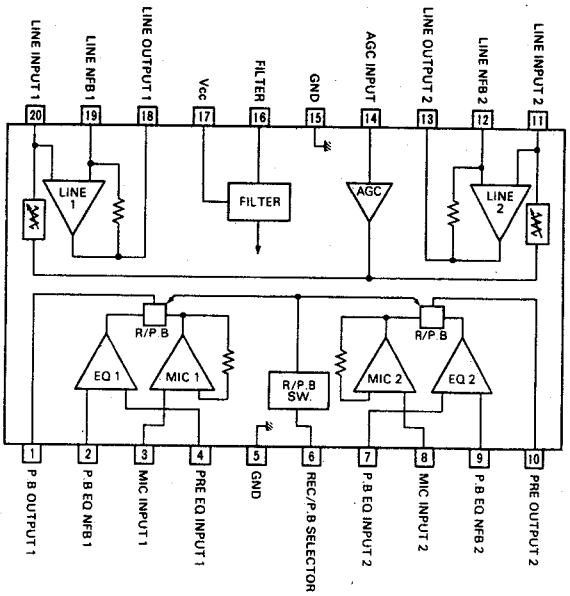


3. INTERIOR BLOCK DIAGRAM OF IC

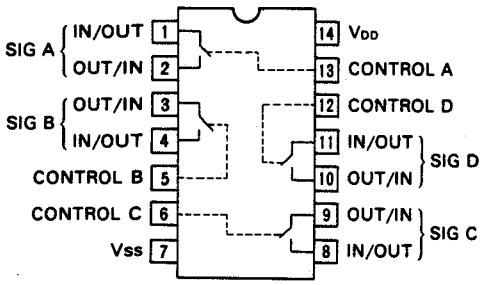
•TC9138AP (AMPS IC)



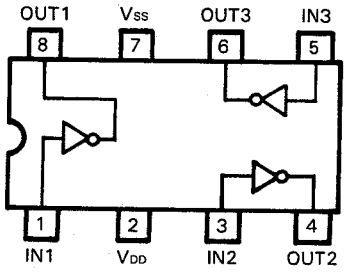
•M51161P (ALC & PLAY EQ Amp. IC)



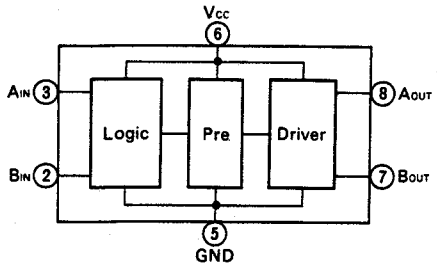
•BU4066B/MSM4066BRS/μPD4066BC
(Quard Analog SW. IC)



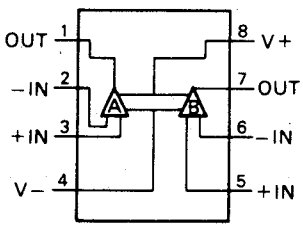
•LC4969 (Triple Inverter IC)



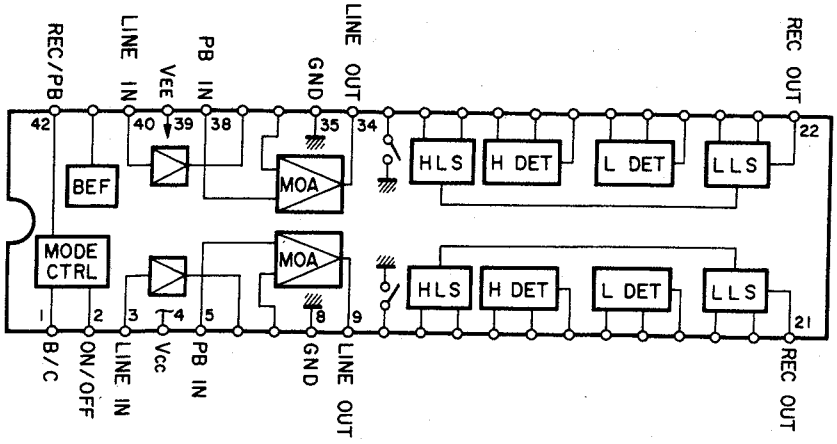
•BA6208 (Motor Drive IC)



•M5218P (OP Amp. IC)

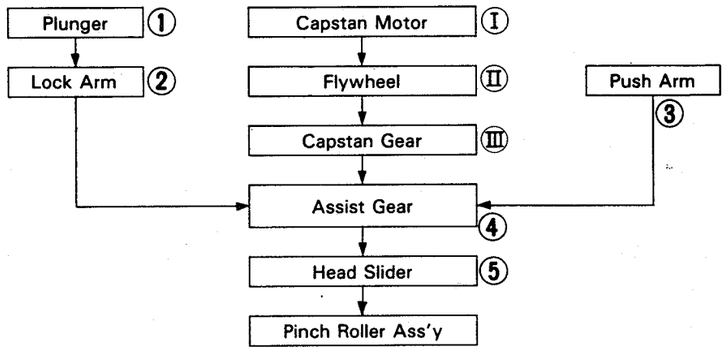


•CX-20187 (Dolby Noise Reduction IC)



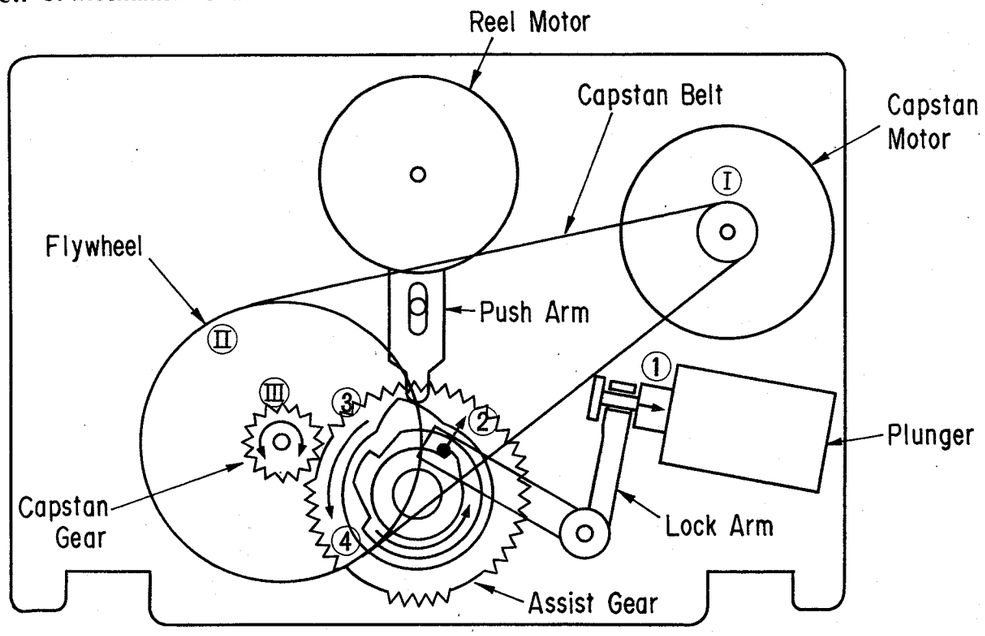
4. OPERATIONS OF PINCH ROLLER

4-1. Torque Transportation Flowchart

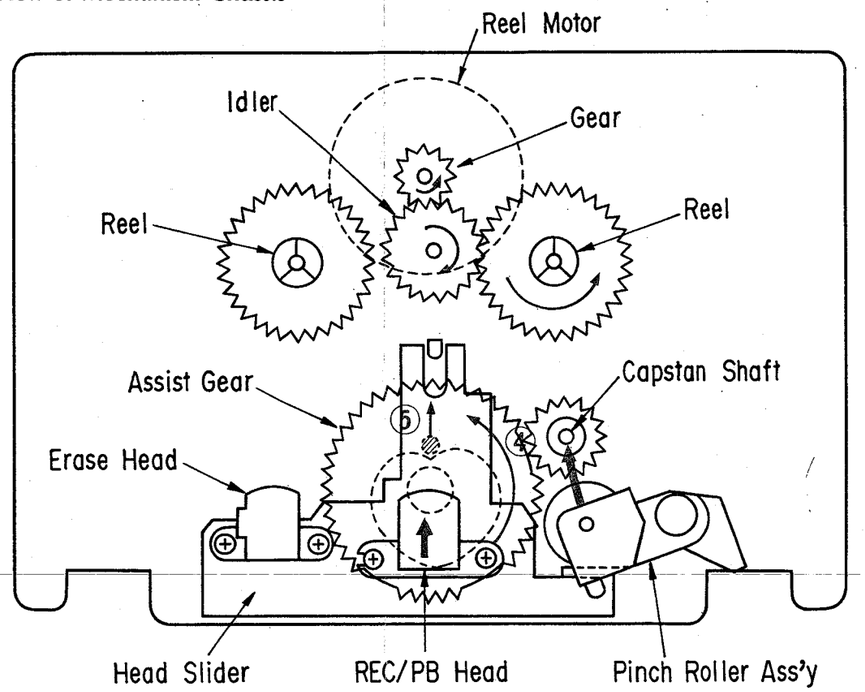


• The pinch roller is brought into pressure contact with the capstan shaft.

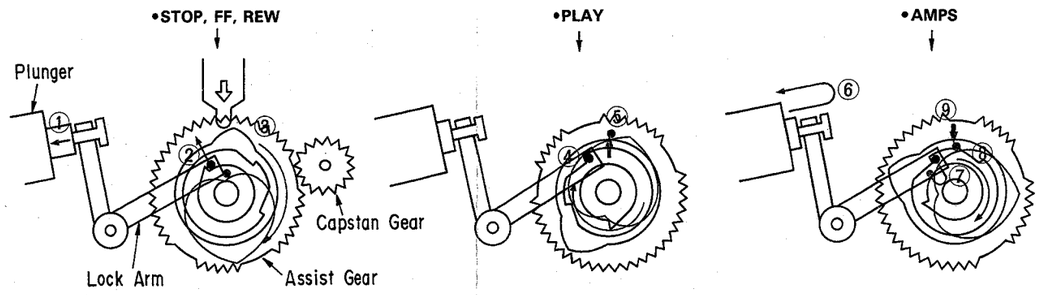
4-2. Rear View of Mechanism Chassis



4-3. Front View of Mechanism Chassis



4-4. Cam Positions in the Modes of PLAY, FF, REW & STOP



5. ADJUSTMENTS

5-1. Tape Speed Adjustment

• Adjust the tape speed of b-side as fast as a-side.

Note: 1. Use Sansui Test Tape, SCT-3SK (3 kHz signals are recorded on the tape).
2. Connections are shown in Fig. 5-1.

Fig. 5-1

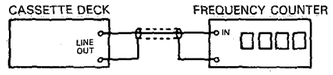
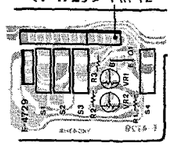


Fig. 5-2 <F-4729> Pin 12



1) Tape Speed Adjustment (NORMAL SPEED)

STEP	SUBJECT	MEASURE OUTPUT	SETTING	ADJUSTMENT	ADJUST FOR	REMARKS
1.	A Side Mecha.	LINE OUT Frequency counter	Playback the TEST TAPE SCT-S3K. A Side Mecha	Turn semi-variable resistor (tVR1) of A Side Mecha. as Fig. 5-2.	3000Hz±30Hz	Use small screw driver.
2.	B Side Mecha.		Playback the TEST TAPE SCT-S3K. B Side Mecha.	Turn semi-variable resistor (tVR1) of B Side Mecha. as Fig. 5-2.	3000Hz±30Hz	

2) Tape Speed Adjustment (HIGH SPEED)

Note: 1. Before this adjustment, regulate "5-1. Tape Speed Adjustment (NORMAL SPEED)"
2. Short between Pin No. 12 (R3) on F-4729 & Ground (See Fig. 5-2)

STEP	SUBJECT	MEASURE OUTPUT	SETTING	ADJUSTMENT	ADJUST FOR	REMARKS
1.	A Side Mecha.	LINE OUT Frequency counter	Playback the TEST TAPE SCT-S3K. A Side Mecha	Turn semi-variable resistor (tVR2) of A Side Mecha. as Fig. 5-2.	6000Hz±60Hz	Use small screw driver.
2.	B Side Mecha.		Playback the TEST TAPE SCT-S3K. B Side Mecha.	Turn semi-variable resistor (tVR2) of B Side Mecha. as Fig. 5-2.	6000Hz±60Hz	

5-2. Playback Adjustment

Note: 1. Before this adjustment, clean REC/P.B. head surface.
2. For this adjustment, use Sansui Test Tape, SCT-F10K, and SCT-L400.
3. Set the Dolby NR switch to be OFF.
4. Connections are shown in Fig. 5-3.

Fig. 5-3

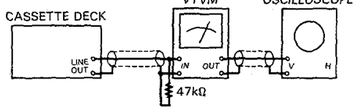
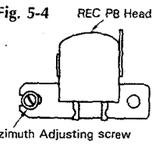


Fig. 5-4 REC PB Head



1) b-Side Mecha. Adjustment

STEP	SUBJECT	MEASURE OUTPUT	SETTING	ADJUSTMENT	ADJUST FOR	REMARKS
1.	REC/P.B. Head Adj.	LINE OUT VTVM and Scope	Playback the TEST TAPE SCT-F10K	Adjust the azimuth adjusting screw in Fig. 5-4.	MAX. Output both channels.	Refer to removement of Lid Ass'y on Page 20. After this adjustment, lock the screw with paint.
2.	Playback Level Pre Adj.	Between Point Ⓐ (vC7L) and GND/Point Ⓑ (vC7R) and GND VTVM and Scope	Playback the TEST TAPE SCT-L400	Adjust each vVR1 (L-CH and R-CH, F-4948)	10mV±2dB	See Fig. 5-6 and Top View on Page 18.
3.	Playback Level Adj.	LINE OUT VTVM and Scope	Playback the TEST TAPE SCT-L400	Adjust each xVR1 (L-CH and R-CH, F-4960)	320mV±2dB	See Fig. 5-7 and Top View on Page 18.

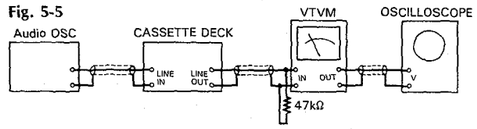
2) a-Side Mecha. Adjustment

STEP	SUBJECT	MEASURE OUTPUT	SETTING	ADJUSTMENT	ADJUST FOR	REMARKS
1.	REC/P.B. Head Adj.	LINE OUT VTVM and Scope	Playback the TEST TAPE SCT-F10K	Adjust the azimuth adjusting screw in Fig. 5-4.	MAX. Output both channels.	Refer to removement of Lid Ass'y on Page 20. After this adjustment, lock the screw with paint.
2.	Playback Level Adj.	Same as above	Playback the TEST TAPE SCT-L400	Adjust each vVR251 (L-CH and R-CH, F-4991)	320mV±2dB	See Top View on Page 18.

5-3. REC Level & Frequency Response Adjustment <b Side Mecha. only>

Note: 1. Connections are shown in Fig. 5-5.
2. Set the Dolby NR switch to be OFF.
3. Short between Point © (Terminal ⓒ, F-4833) & Ground (See. Fig. 5-8)
4. FADER VOLUME ..... MAX/ALC.

Fig. 5-5



STEP	SUBJECT	MEASURE OUTPUT	SETTING	ADJUSTMENT	ADJUST FOR	REMARKS
1.	REC/Level Adj.	Feed 1 kHz from Audio S.G. into LINE IN.	LINE OUT, VTVM and Scope	Load the TEST TAPE SCT-SA. 1. Push the PAUSE, and REC knob. 2. Adjust the output level of Audio SG. for obtaining 225mV on VTVM. 3. Push the PAUSE knob, then record the 1kHz signal. 4. Playback the 1kHz signal. 5. Confirm that the output levels on both channels are 225mV±2dB on VTVM.	1. If not turn vVR2 (REC, L-CH, F-4948) and vVR2 (REC, R-CH, F-4948) until output level 225mV±2dB on both channels are obtained.	•See Fig. 5-6 and Top View on Page 18.
2.	Frequency Respõnse Adj.	Feed 1kHz 10mV and 10kHz 10mV, from Audio S.G. into LINE IN.	Same as above	Load the TEST TAPE SCT-SA. 1. Record the 1kHz and 10kHz signals. 2. Playback the 1kHz and 10kHz signals, then confirm that both output levels equal.	1. If not, adjust vVR50 (F-4948) for L-CH and vVR50 (F-4948) for R-CH slightly until the output levels will be equal.	•See Fig. 5-6 and Top View on Page 18.
3.	METAL REC Level Adj.	Feed 1kHz from Audio S.G. into LINE IN.	LINE OUT, VTVM and Scope	Load the TEST TAPE SCT-MA. 1. Push the PAUSE, and REC knob. 2. Adjust the output level of Audio SG. for obtaining 225mV on VTVM. 3. Push the PAUSE knob, then record the 1kHz signal. 4. Playback the 1kHz signal. 5. Confirm that the output levels on both channels are 225mV±2dB on VTVM.	1. If not turn vVR3 (REC, L-CH, F-4948) and vVR3 (REC, R-CH, F-4948) until output level 225mV±2dB on both channels are obtained.	•See Fig. 5-6 and Top View on Page 18.

◆ List of Sansui Test Tape

Name of TEST TAPE	Recorded Frequency	Description	Equivalent To
SCT-F40	40 Hz	Playback Frequency Response Check	—
SCT-F1K	1 kHz	High Frequency Equialization Check	—
SCT-F10K	10 kHz	REC/PB Head Adjustment	—
SCT-L400N	400 Hz	Playback Level and Indicator Level Adjustment	—
SCT-S3K	3 kHz	Speed Check and Wow & Flutter Check	—
*SCT-AD (NORMAL)	—	Recording Bias Adjustment	TDK AD
*SCT-SA (HIGH)	—	REC/PB Level Adjustment	TDK SA
*SCT-MA (METAL)	—	Frequency Response Check	TDK MA

•**Note:** Some reference tapes marked * are not supplied.
As these are equivalent to ones indicated above, please obtain these blank tapes on your side as possible.

Fig. 5-6

F-4948 <Component Side>

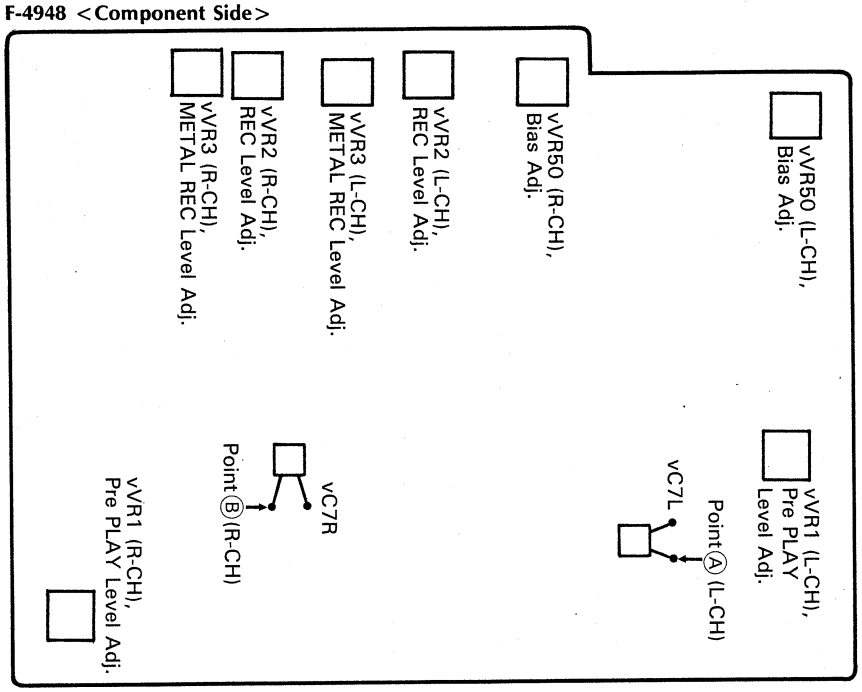

vVR50 (L-CH), Bias Adj.
vVR1 (L-CH), Pre PLAY Level Adj.
vC7L
Point Ⓐ (L-CH)
vVR50 (R-CH), Bias Adj.
vVR2 (L-CH), REC Level Adj.
vVR3 (L-CH), METAL REC Level Adj.
vVR2 (R-CH), REC Level Adj.
vVR3 (R-CH), METAL REC Level Adj.
vC7R
Point Ⓑ (R-CH)
vVR1 (R-CH), Pre PLAY Level Adj.

Fig. 5-7

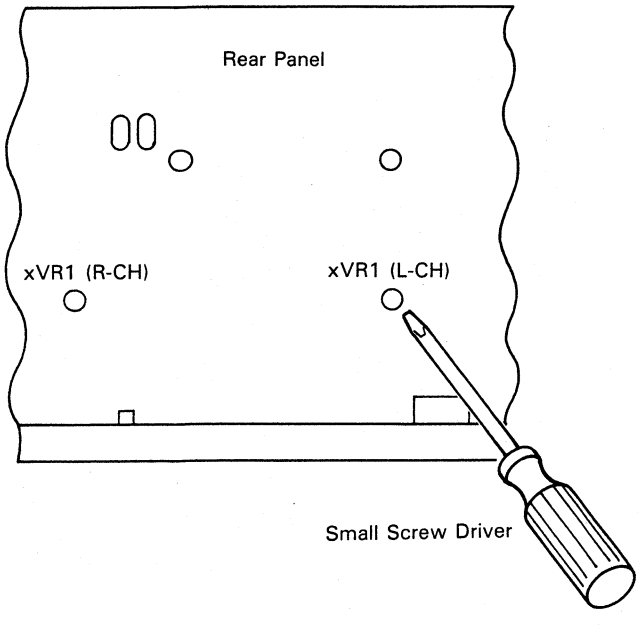
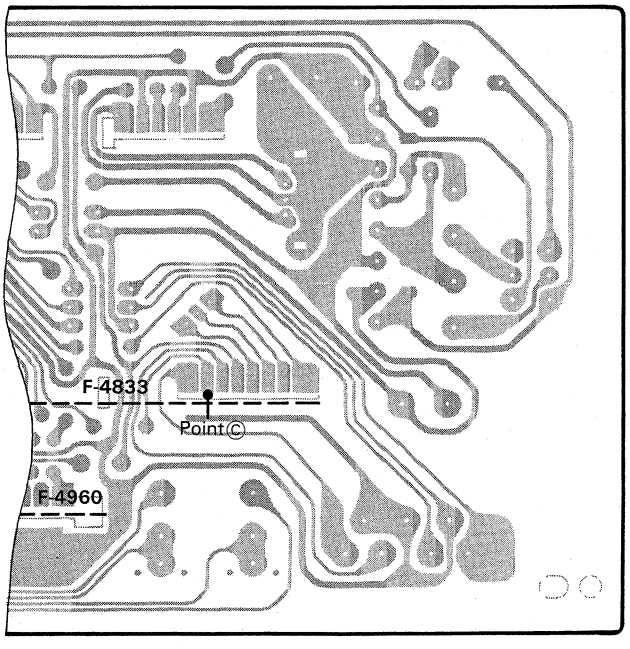


Fig. 5-8 <F-4976 Pattern Side>

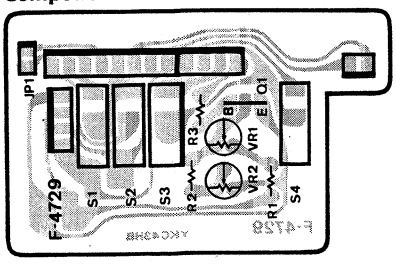
<Front Side>



6. PARTS LOCATION & PARTS LIST

6-1. F-4729 Cassette Half SW. Board

Component Side

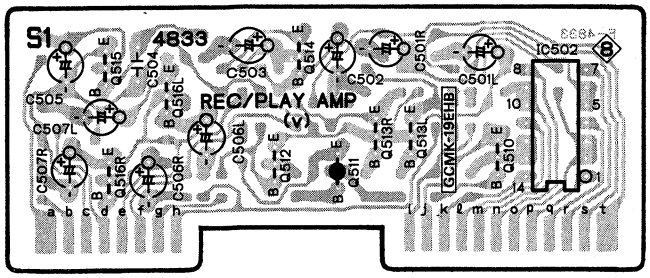


Parts List

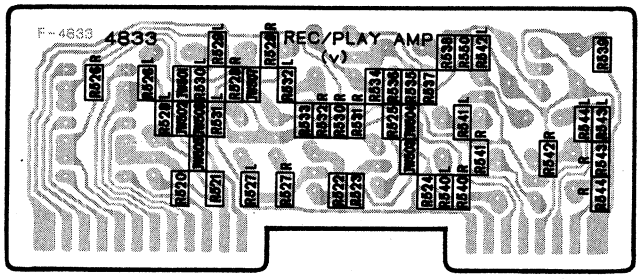
Parts No.	Stock No.	Description
•Transistor		
tQ1	07206901	2SC2001
•Diode		
tD1	03111600	1S2473D
tVR1	46839600	10kΩ S.V.R., NORMAL SPEED
tVR2	46839500	4.7kΩ S.V.R., HIGH SPEED
tS1	47292710	Leaf SW., half sensor
tS2	47292710	Leaf SW., prevention tab sensor <b-side Mechanism>
tS3	47292710	Leaf SW., tape sel. HIGH
tS4	47292710	Leaf SW., tape sel. METAL <b-side Mechanism>

6-2. F-4833 Output Signal Selector Board (Stock No. 00884801)

Component Side



Pattern Side <Chip Parts>



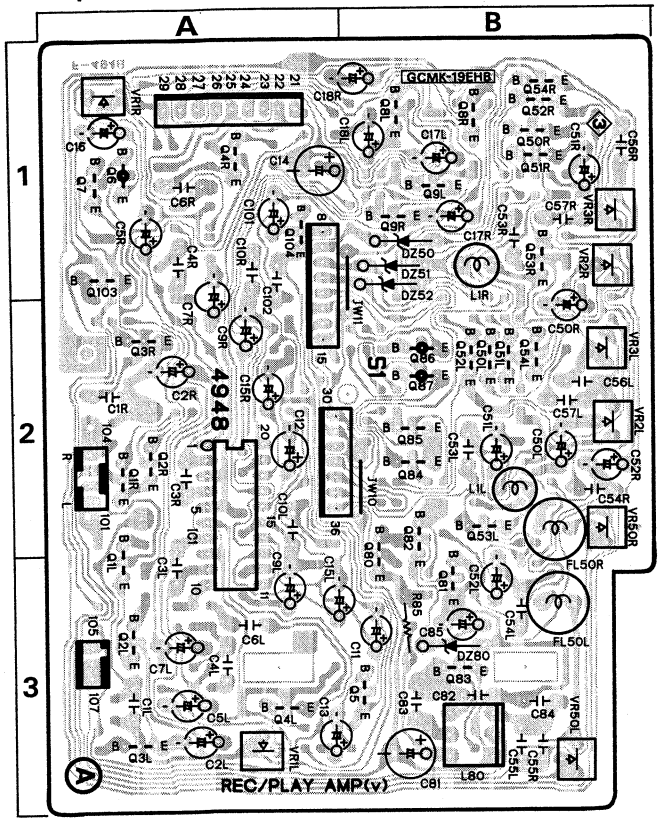
Parts List

Parts No.	Stock No.	Description
•Transistor		
vQ510	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ511	46367001	2SA1115
	or 46392001	2SA1175
vQ512	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ513	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ514	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ515	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ516	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
•IC		
vIC502	46421000	μPD4066BC
	or 48054500	MSM4066BRS
	or 48063800	BU4066B

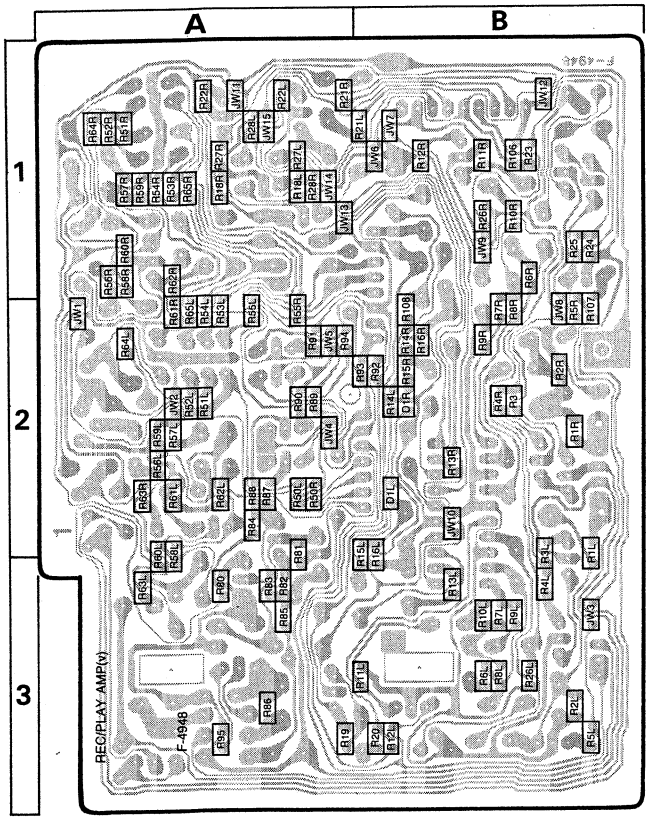
Parts No.	Stock No.	Description
vJW501	46741100	Cross Conductor (Chip)
vJW502	46741100	Cross Conductor (Chip)
vJW503	46741100	Cross Conductor (Chip)
vJW504	46741100	Cross Conductor (Chip)
vJW505	46741100	Cross Conductor (Chip)
vJW507	46741100	Cross Conductor (Chip)
vR520	46750000	10kΩ 1/8W Chip R.
vR521	46750800	22kΩ 1/8W Chip R.
vR522	46750800	22kΩ 1/8W Chip R.
vR523	46750800	22kΩ 1/8W Chip R.
vR524	46750800	22kΩ 1/8W Chip R.
vR525	46750800	22kΩ 1/8W Chip R.
vR526	46748400	2.2kΩ 1/8W Chip R.
vR527	46749200	4.7kΩ 1/8W Chip R.
vR531	46748400	2.2kΩ 1/8W Chip R.
vR533	46751600	47kΩ 1/8W Chip R.
vR534	46754600	820kΩ 1/8W Chip R.
vR535	46750000	10kΩ 1/8W Chip R.
vR537	46744400	47Ω 1/8W Chip R.
vR538	46749200	4.7kΩ 1/8W Chip R.
vR539	46747000	560Ω 1/8W Chip R.
vR540	46750400	15kΩ 1/8W Chip R.
vR541	46751600	47kΩ 1/8W Chip R.
vR542	46748400	2.2kΩ 1/8W Chip R.
vR543	46750800	22kΩ 1/8W Chip R.
vR544	46744000	33Ω 1/8W Chip R.
vR550	46750800	22kΩ 1/8W Chip R.

6-3. F-4948 b-Side REC & PLAY Amp. Board (Stock No. 00884601)

Component Side



Pattern Side <Chip Parts>



Parts List

Parts No.	Stock No.	Description
•Transistor		
vQ1	46581701	2SC1845
vQ2	46581701	2SC1845
vQ3	46359801	2SC2001
	or 48055901	2SD1468S
vQ4	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ5	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ6	46719800	DTA124ES
vQ7	46719900	DTC124
vQ8	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ9	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ50	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ51	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ52	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ53	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ54	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ80	46614101	2SC3243
vQ81	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ82	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ83	48061801	2SC3244
vQ84	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ85	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ86	46367001	2SA1115
	or 46392001	2SA1175
	or 48058601	2SA933S
vQ87	46367001	2SA1115
	or 46392001	2SA1175
	or 48058601	2SA933S
vQ103	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ104	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
•IC		
vIC1	46362100	M51161P
•Diode		
vD1	46086000	1S1588TP-3
	or 46852000	RLS-73 (Chip)
vD2	03111600	1S2473
•Zener Diode		
vDZ50	46111100	05Z5.1-X
	or 46111200	05Z5.1-Y
	or 46111300	05Z5.1-Z

to be continued ►

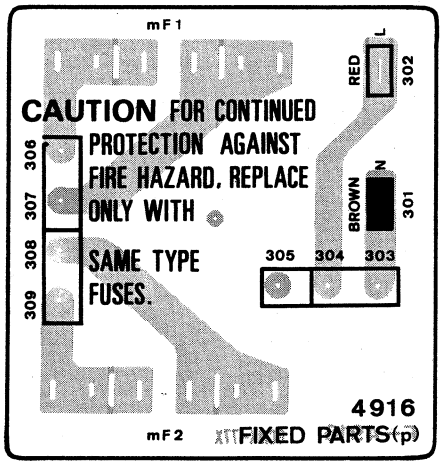
Parts List <F-4948>

Parts No.	Stock No.	Description
vDZ51	46111100	05Z5.1-X
	or 46111200	05Z5.1-Y
	or 46111300	05Z5.1-Z
vDZ52	46111100	05Z5.1-X
	or 46111200	05Z5.1-Y
	or 46111300	05Z5.1-Z
vDZ80	46109400	05Z3.0-Y
vJW1	46741100	Cross Conductor (Chip)
vJW2	46741100	Cross Conductor (Chip)
vJW3	46741100	Cross Conductor (Chip)
vJW4	46741100	Cross Conductor (Chip)
vJW5	46741100	Cross Conductor (Chip)
vJW6	46741100	Cross Conductor (Chip)
vJW7	46741100	Cross Conductor (Chip)
vJW8	46741100	Cross Conductor (Chip)
vJW9	46741100	Cross Conductor (Chip)
vJW10	46741100	Cross Conductor (Chip)
vJW11	46741100	Cross Conductor (Chip)
vJW12	46741100	Cross Conductor (Chip)
vJW13	46741100	Cross Conductor (Chip)
vJW14	46741100	Cross Conductor (Chip)
vJW15	46741100	Cross Conductor (Chip)
vR1	46742800	10Ω 1/8W Chip R.
vR2	46751800	56kΩ 1/8W Chip R.
vR3	46750400	15kΩ 1/8W Chip R.
vR4	46748800	3.3kΩ 1/8W Chip R.
vR5	46748400	2.2kΩ 1/8W Chip R.
vR6	46746600	390Ω 1/8W Chip R.
vR7	46748400	2.2kΩ 1/8W Chip R.
vR8	46752600	120kΩ 1/8W Chip R.
vR9	46750400	15kΩ 1/8W Chip R.
vR10	46746200	270Ω 1/8W Chip R.
vR11	46753200	220kΩ 1/8W Chip R.
vR12	46750800	22kΩ 1/8W Chip R.
vR13	46744600	56Ω 1/8W Chip R.
vR14	46748400	2.2kΩ 1/8W Chip R.
vR15	46747400	820Ω 1/8W Chip R.
vR16	46746200	270Ω 1/8W Chip R.
vR18	46749300	5.1kΩ 1/8W Chip R.
vR19	46750800	22kΩ 1/8W Chip R.
vR20	46748400	2.2kΩ 1/8W Chip R.
vR21	46749200	4.7kΩ 1/8W Chip R.
vR22	46753200	220kΩ 1/8W Chip R.
vR23	46747600	1kΩ 1/8W Chip R.
vR24	46750800	22kΩ 1/8W Chip R.
vR26	46750000	10kΩ 1/8W Chip R.
vR27	46749200	4.7kΩ 1/8W Chip R.
vR28	46750000	10kΩ 1/8W Chip R.
vR29	46750800	22kΩ 1/8W Chip R.
vR50	46749200	4.7kΩ 1/8W Chip R.
vR51	46749000	3.9kΩ 1/8W Chip R.
vR52	46749800	8.2kΩ 1/8W Chip R.
vR53	46750000	10kΩ 1/8W Chip R.
vR54	46750000	10kΩ 1/8W Chip R.
vR55	46749200	4.7kΩ 1/8W Chip R.
vR56	46750000	10kΩ 1/8W Chip R.
vR57	46749800	8.2kΩ 1/8W Chip R.
vR58	46754400	680kΩ 1/8W Chip R.
vR59	46753400	270kΩ 1/8W Chip R.
vR60	46750400	15kΩ 1/8W Chip R.
vR61	46747600	1kΩ 1/8W Chip R.
vR62	46744400	47Ω 1/8W Chip R.
vR63	46748400	2.2kΩ 1/8W Chip R.
vR64	46749600	6.8kΩ 1/8W Chip R.
vR65	46750000	10kΩ 1/8W Chip R.
vR80	46750000	10kΩ 1/8W Chip R.
vR81	46747200	680Ω 1/8W Chip R.
vR82	46747200	680Ω 1/8W Chip R.
vR83	46749200	4.7kΩ 1/8W Chip R.
vR84	46750800	22kΩ 1/8W Chip R.
vR85	46742800	10Ω 1/8W Chip R.
vR86	46750000	10kΩ 1/8W Chip R.

Parts No.	Stock No.	Description
vR87	46749800	8.2kΩ 1/8W Chip R.
vR88	46748800	3.3kΩ 1/8W Chip R.
vR89	46750800	22kΩ 1/8W Chip R.
vR90	46750800	22kΩ 1/8W Chip R.
vR91	46752400	100kΩ 1/8W Chip R.
vR92	46748400	2.2kΩ 1/8W Chip R.
vR93	46748400	2.2kΩ 1/8W Chip R.
vR94	46752400	100kΩ 1/8W Chip R.
vR95	46742000	4.7Ω 1/8W Chip R.
vR106	46747200	680Ω 1/8W Chip R.
vR107	46750800	22kΩ 1/8W Chip R.
vC19	46710800	10μF 16V E.C.
vC20	46710800	10μF 16V E.C.
vC84	46657000	3900pF 100V F.C.
vFL50	42904400	Peaking Coil
vL1	48121500	Inductor 2.7mH
vL80	46362200	Bias OSC Coil
vVR1	48078400	470Ω S.V.R., Pre PLAY Level Adj.
vVR2	48079600	47kΩ S.V.R., REC Level Adj.
vVR3	48079600	47kΩ S.V.R., METAL REC Level Adj.
vVR50	48079800	100kΩ S.V.R., Bias Adj.

6-4. F-4916 Fuse Board

Component Side

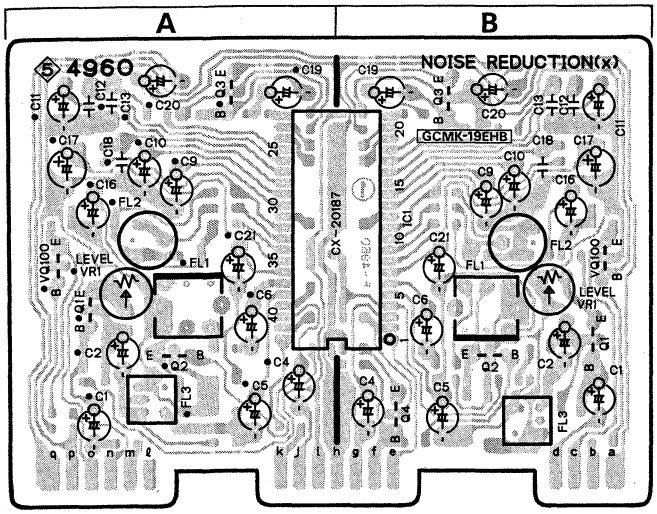


Parts List

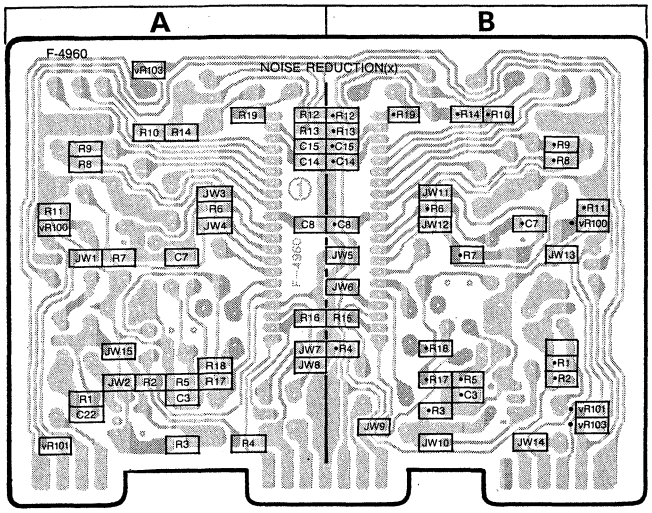
Parts No.	Stock No.	Description
⚠mF1	07184600	Fuse 800mA (EU,BS,AS)
⚠mF2	07184300	Fuse 400mA (EU,BS,AS)

6-5. F-4960 Noise Reduction Board (Stock No. 00884701)

Component Side



Pattern Side <Chip Parts>



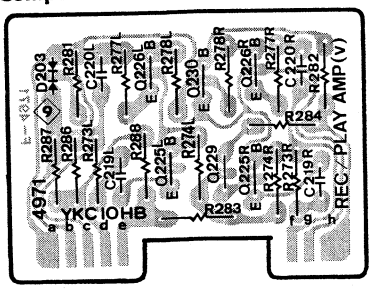
•**Note:** On this circuit board, the right channel is specified by "●" mark on top of the parts No.

Parts List

Parts No.	Stock No.	Description
•Transistor		
xQ1	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
xQ2	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
xQ3	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
xQ4	46719900	DTC124
•IC		
xIC1	48179900	CX-20187
xJW1	46741100	Cross Conductor (Chip)
xJW3	46741100	Cross Conductor (Chip)
xJW4	46741100	Cross Conductor (Chip)
xJW5	46741100	Cross Conductor (Chip)
xJW6	46741100	Cross Conductor (Chip)
xJW7	46741100	Cross Conductor (Chip)
xJW8	46741100	Cross Conductor (Chip)
xJW9	46741100	Cross Conductor (Chip)
xJW11	46741100	Cross Conductor (Chip)
xJW12	46741100	Cross Conductor (Chip)
xJW13	46741100	Cross Conductor (Chip)
xJW14	46741100	Cross Conductor (Chip)
xJW15	46741100	Cross Conductor (Chip)
xR1	46753200	220kΩ 1/8W Chip R.
xR2	46748400	2.2kΩ 1/8W Chip R.
xR3	46749400	5.6kΩ 1/8W Chip R.
xR4	46749200	4.7kΩ 1/8W Chip R.
xR5	46754800	1MΩ 1/8W Chip R.
xR6	46746700	430Ω 1/8W Chip R.
xR7	46748500	2.4kΩ 1/8W Chip R.
xR8	46749300	5.1kΩ 1/8W Chip R.
xR9	46749600	6.8kΩ 1/8W Chip R.
xR10	46747200	680Ω 1/8W Chip R.
xR11	46751600	47kΩ 1/8W Chip R.
xR12	46748600	2.7kΩ 1/8W Chip R.
xR13	46747700	1.1kΩ 1/8W Chip R.
xR14	46753200	220kΩ 1/8W Chip R.
xR15	46752400	100kΩ 1/8W Chip R.
xR16	46750800	22kΩ 1/8W Chip R.
xR17	46749400	5.6kΩ 1/8W Chip R.
xR18	46748600	2.7kΩ 1/8W Chip R.
xR19	46745200	100Ω 1/8W Chip R.
xR20	46748600	2.7kΩ 1/8W Chip R.
xR21	46748400	2.2kΩ 1/8W Chip R.
xR22	46748400	2.2kΩ 1/8W Chip R.
xC3	46794800	2700pF 50V Chip C.
xC7	46779900	560pF 50V Chip C.
xC8	46795100	4700pF 50V Chip C.
xC14	46795300	6800pF 50V Chip C.
xC15	46795500	10000pF 50V Chip C.
xC22	46778100	100pF 50V Chip C.
xFL1	46177500	DOLBY Filter
	or 46177501	DOLBY Filter
xFL2	48193300	DOLBY Filter
xFL3	48193900	Trap Filter (85kHz)
xVR1	46633700	1kΩ S.V.R., PLAY Level Adj.

6-6. F-4971 REC Amp. Tape Selector Board

Component Side (Stock No. 00885001)

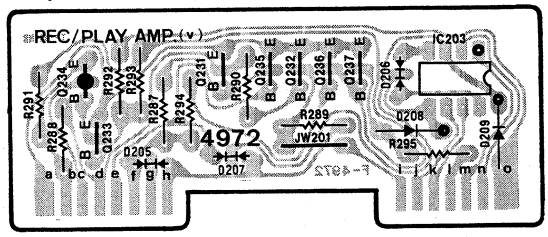


Parts List

Parts No.	Stock No.	Description
•Transistor		
vQ225	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ226	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ229	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ230	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
•Diode		
vD203	46464000	MC921

6-7. F-4972 Input/Output Signal Selector Control Board

Component Side (Stock No. 00885101)

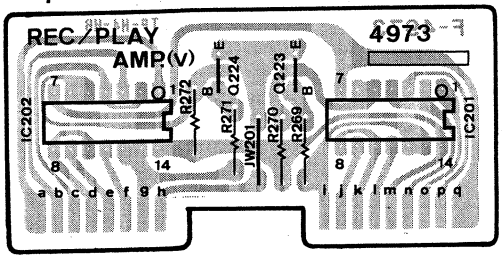


Parts List

Parts No.	Stock No.	Description
•Transistor		
vQ231	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ232	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ233	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ234	46719800	DTA124ES
vQ235	46719900	DTC124
vQ236	46719900	DTC124
•IC		
vIC203	46671300	LC4969
•Diode		
vD205	46464000	MC921
vD206	46464000	MC921
vD210	03111600	1S2473
	or 03111800	1S1588
vD211	03111600	1S2473
	or 03111800	1S1588
vD212	03111600	1S2473
	or 03111800	1S1588
vD604	03111600	1S2473
	or 03111800	1S1588

6-8. F-4973 Input Signal Selector Board

Component Side (Stock No. 00885201)

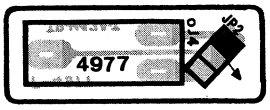


Parts List

Parts No.	Stock No.	Description
•Transistor		
vQ223	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
vQ224	46367101	2SC2603
	or 46367301	2SC2458
	or 48058801	2SC1740S
•IC		
vIC201	46421000	μPD4066BC
	or 48054500	MSM4066BRS
	or 48063800	BU4066B
vIC202	46421000	μPD4066BC
	or 48054500	MSM4066BRS
	or 48063800	BU4066B

6-9. F-4977 PHONES Jack Board

Component Side

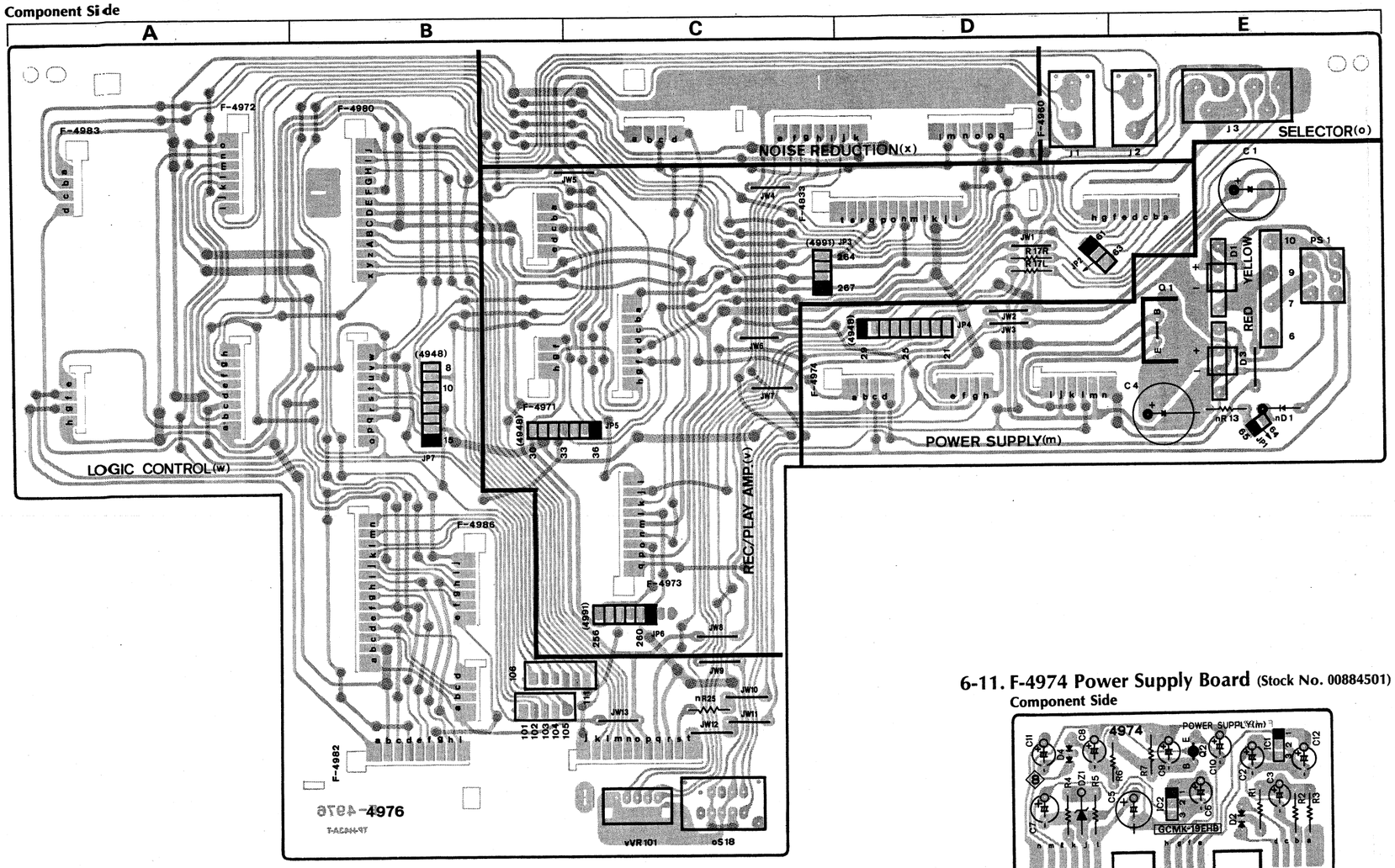


Parts List

Parts No.	Stock No.	Description
oJ4	46265700	Jack, PHONES

6-10. F-4976 Main Wiring Board (Stock No. 00883601)

Component Side

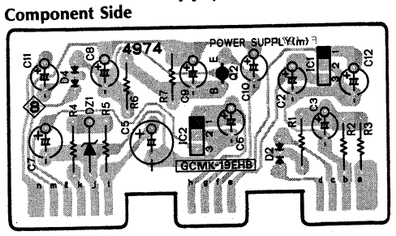


Parts List

Parts No.	Stock No.	Description
•Transistor		
⚠mQ1	03083901	2SD313AL
•Diode		
⚠mD1	03117000	RB152-LFF
⚠	or 46273600	DBB10-B
⚠mD3	03117000	RB152-LFF
⚠	or 46273600	DBB10-B
mC12	00305400	10μF 25V E.B.
•Diode		
⚠nD1	03117600	1S2473T77
⚠	or 46086000	1S1588TP-3
oS18	48126800	Slide SW., DOLBY NR
oJ1	46547200	Jack, COMPU SELECTOR
oJ2	46547200	Jack, COMPU EDIT
oJ3	46371500	4P Terminal Board, LINE IN LINE OUT
⚠pS1	48172700	Push SW., POWER
•Diode		
vD601	03111600	1S2473
	or 03111800	1S1588
vD602	03111600	1S2473
	or 03111800	1S1588
vD603	03111600	1S2473
	or 03111800	1S1588
⚠vD606	03111600	1S2473
⚠	or 03111800	1S1588
•Zener Diode		
vDZ601	46099100	05Z3.0-X
	or 46099200	05Z3.0-Y
	or 46099300	05Z3.0-Z
vVR101	48201700	50kΩ V.R., FADER

6-11. F-4974 Power Supply Board (Stock No. 00884501)

Component Side

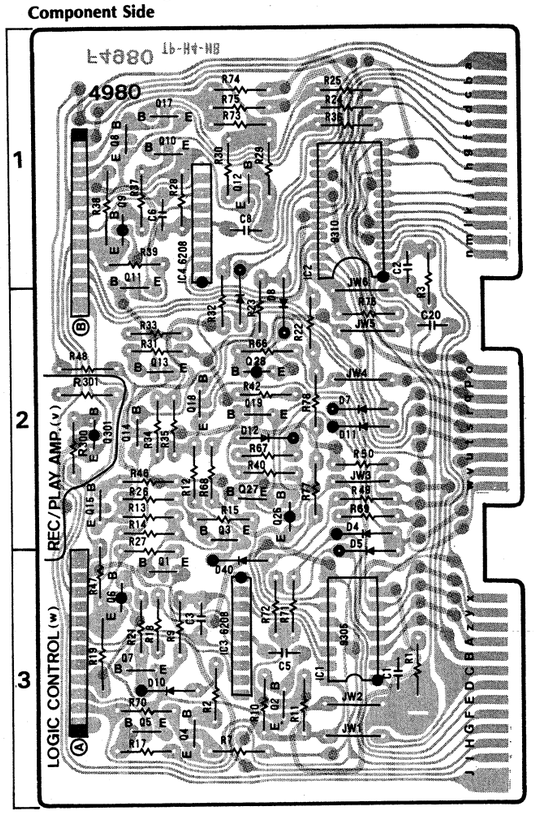


Parts List

Parts No.	Stock No.	Description
•Transistor		
mQ2	46367001	2SA1115
	or 46392001	2SA1175
•IC		
⚠mIC1	46144200	NJM78M05A
⚠	or 46359400	L78N05
⚠mIC2	46144500	NJM78M09A
⚠	or 46499800	L78N09
•Diode		
⚠mD2	46464000	MC921
mD4	46836900	MC931
•Zener Diode		
mDZ1	46113800	05Z12-X
	or 46113900	05Z12-Y

6-12. F-4980 Logic Control Board (Stock No. 00883901)

Component Side



Parts List

Parts No.	Stock No.	Description
•Transistor		
vQ301	46367001	2SA1115
	or 46392001	2SA1175
wQ1	46614101	2SC3243
wQ2	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ3	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ4	46367001	2SA1115
	or 46392001	2SA1175
	or 48058601	2SA933S
wQ5	46359801	2SC2001
	or 46614101	2SC3243
	or 48055901	2SD1468S
wQ6	46359701	2SA952
	or 46614001	2SA1283
wQ7	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ8	46359801	2SC2001
	or 46614101	2SC3243
	or 48055901	2SD1468S
wQ9	46359701	2SA952
	or 46614001	2SA1283
wQ10	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S

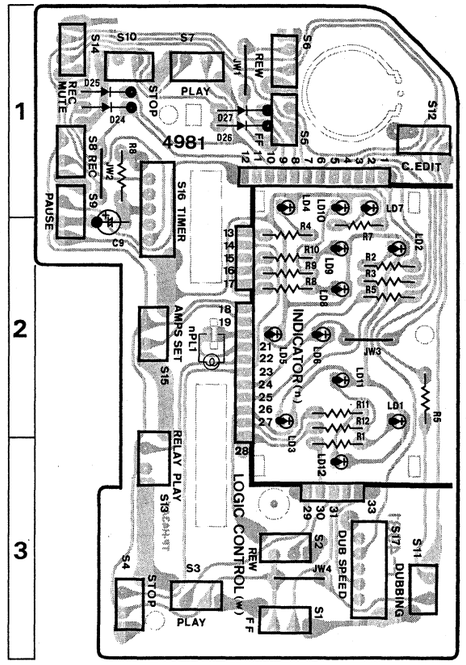
to be continued ►

Parts List <F-4980>

Parts No.	Stock No.	Description
wQ11	46614101	2SC3243
wQ12	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ13	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ14	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ15	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ17	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ18	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ19	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ26	46834200	DTA144ES
wQ27	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ28	46367001	2SA1115
	or 46392001	2SA1175
	or 48058601	2SA933S
•IC		
wIC1	48003700	TC9305P-010
wIC2	48003800	TC9310N-055
wIC3	46149600	BA6208
wIC4	46149600	BA6208
•Diode		
wD4	03117600	1S2473T77
	or 46086000	1S1588TP-3
wD5	03117600	1S2473T77
	or 46086000	1S1588TP-3
wD7	03117600	1S2473T77
	or 46086000	1S1588TP-3
wD8	03117600	1S2473T77
	or 46086000	1S1588TP-3
wD10	48177000	11DQ-03
	or 48177100	11DQ-04
wD11	03117600	1S2473T77
	or 46086000	1S1588TP-3
wD12	03117600	1S2473T77
	or 46086000	1S1588TP-3
wD13	03117600	1S2473T77
	or 46086000	1S1588TP-3
wD14	03117600	1S2473T77
	or 46086000	1S1588TP-3
wD20	03117600	1S2473T77
	or 46086000	1S1588TP-3
wD40	03117600	1S2473T77
	or 46086000	1S1588TP-3
⚠wR19	46249200	82Ω 1W N.I.R.
⚠wR27	46228300	27Ω 1/2W N.I.R.
⚠wR38	46249200	82Ω 1W N.I.R.
⚠wR39	46228300	27Ω 1/2W N.I.R.
wC1	46695400	0.012μF 50V F.C.
wC2	46695400	0.012μF 50V F.C.

6-13.F-4981 Operation Control SW. Board

Component Side (Stock No. 00884001)



Parts List

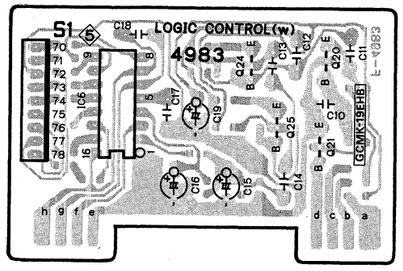
Parts No.	Stock No.	Description
•LED		
nLD1	07250900	TLG-123A
	or 46470300	SEL2410E
	or 48189200	GL-3EG7
nLD2	07250900	TLG-123A
	or 46470300	SEL2410E
	or 48189200	GL-3EG7
nLD3	07251000	TLY-123
	or 46470400	SEL2910A
	or 48189100	GL-3HY57
nLD4	46176900	TLS-123
	or 46470200	SEL2210S
	or 48189000	GL-3HD7
nLD5	46176900	TLS-123
	or 46470200	SEL2210S
	or 48189000	GL-3HD7
nLD6	46176900	TLS-123
	or 46470200	SEL2210S
	or 48189000	GL-3HD7
nLD7	46176900	TLS-123
	or 46470200	SEL2210S
	or 48189000	GL-3HD7
nLD8	46176900	TLS-123
	or 46470200	SEL2210S
	or 48189000	GL-3HD7
nLD9	07251000	TLY-123
	or 46470400	SEL2910A
	or 48189100	GL-3HY57
nLD10	07250900	TLG-123A
	or 46470300	SEL2410E
	or 48189200	GL-3EG7
nLD11	07250900	TLG-123A
	or 46470300	SEL2410E
	or 48189200	GL-3EG7
nLD12	46176900	TLS-123
	or 46470200	SEL2210S
	or 48189000	GL-3HD7

Parts List <F-4981>

Parts No.	Stock No.	Description
nLD13	48189000	GL-3HD7
nPL1	48191900	12V 0.15A Pilot Lamp
oS1	46396700	Push SW., F.FWD (a-side)
oS2	46396700	Push SW., REW (a-side)
oS3	46396700	Push SW., PLAY (a-side)
oS4	46396700	Push SW., STOP (a-side)
oS5	46396700	Push SW., F.FWD (b-side)
oS6	46396700	Push SW., REW (b-side)
oS7	46396700	Push SW., PLAY (b-side)
oS8	46396700	Push SW., REC (b-side)
oS9	46396700	Push SW., PAUSE (b-side)
oS10	46396700	Push SW., STOP (b-side)
oS11	46396700	Push SW., DUBBING
oS12	46396700	Push SW., COMPU EDIT

6-14. F-4983 AMPS Board (Stock No. 00884301)

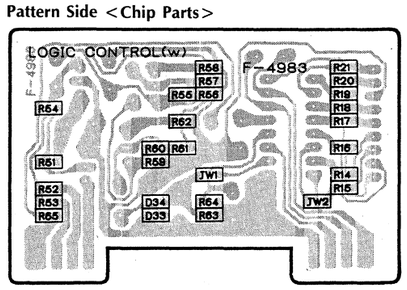
Component Side



Parts List

Parts No.	Stock No.	Description
•Transistor		
wQ20	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ21	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ24	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
wQ25	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
•IC		
wIC6	46369800	TC9138AP
•Diode		
wD33	46852000	RLS-73 (Chip)

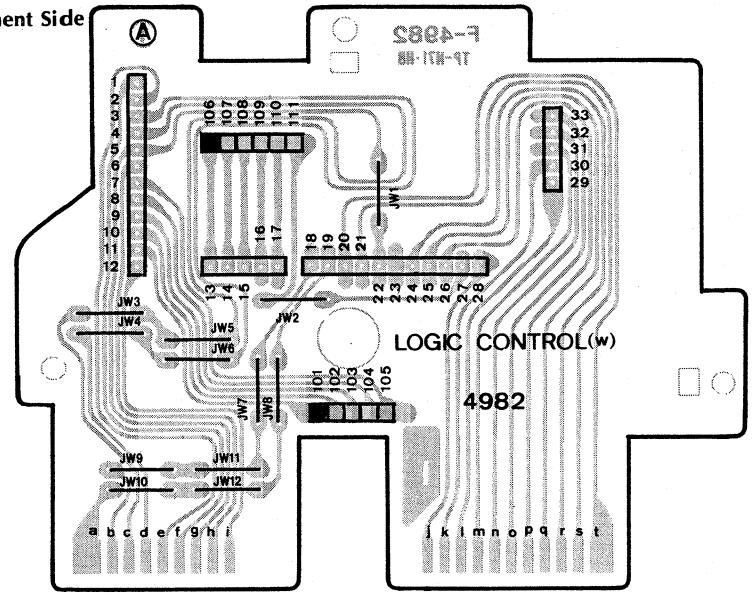
Pattern Side <Chip Parts>



Parts No.	Stock No.	Description
wD34	46852000	RLS-73 (Chip)
wJW1	46741100	Cross Conductor (Chip)
wJW2	46741100	Cross Conductor (Chip)
wR51	46749200	4.7kΩ 1/8W Chip R.
wR52	46751600	47kΩ 1/8W Chip R.
wR53	46751600	47kΩ 1/8W Chip R.
wR54	46749200	4.7kΩ 1/8W Chip R.
wR55	46754400	680kΩ 1/8W Chip R.
wR56	46753000	180kΩ 1/8W Chip R.
wR57	46750000	10kΩ 1/8W Chip R.
wR58	46747000	560Ω 1/8W Chip R.
wR59	46753000	180kΩ 1/8W Chip R.
wR60	46754400	680kΩ 1/8W Chip R.
wR61	46750000	10kΩ 1/8W Chip R.
wR62	46747000	560Ω 1/8W Chip R.
wR63	46754000	470kΩ 1/8W Chip R.
wR64	46752000	68kΩ 1/8W Chip R.
wR65	46747600	1kΩ 1/8W Chip R.

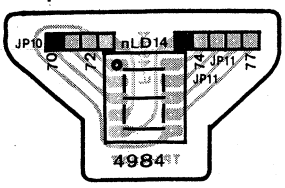
6-15. F-4982 Control SW. Wiring Board

Component Side



6-16. F-4984 AMPS Indicator Board

Component Side

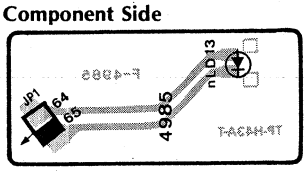


Parts List

Parts No.	Stock No.	Description
•LED		
nLD14	46917700	GL-8P03D

6-17. F-4985 STAND BY Indicator Board

Component Side

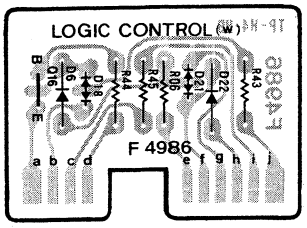


Parts List

Parts No.	Stock No.	Description
•LED		
nLD13	46176900	TLS-123
	or 46470200	SEL2210S

6-18. F-4986 Logic Control Sub Board

Component Side

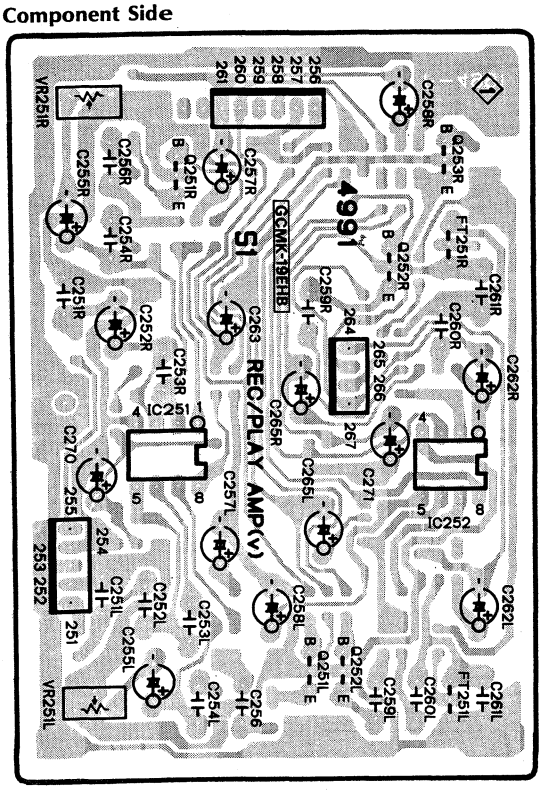


Parts List

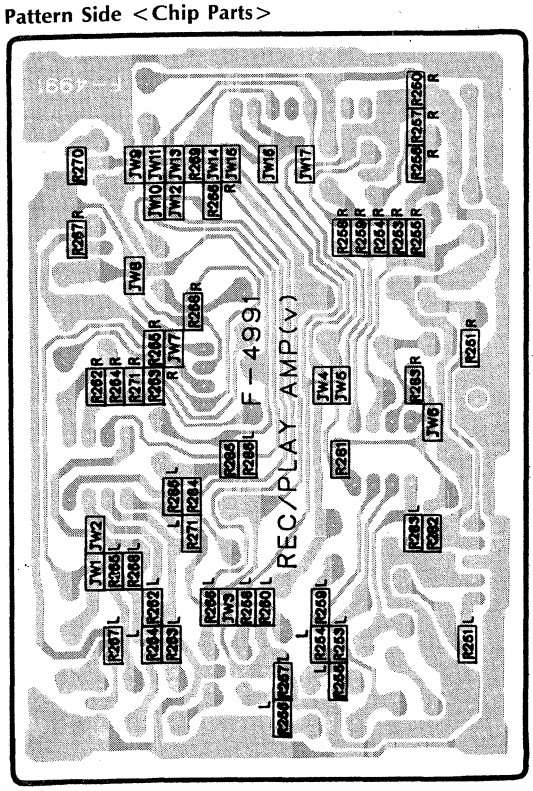
Parts No.	Stock No.	Description
•Transistor		
wQ16	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
•Diode		
wD6	03117600	1S2473T77
	or 46086000	1S1588TP-3
wD18	46463800	MC911
wD21	46463800	MC911
wD22	03117600	1S2473T77
	or 46086000	1S1588TP-3

6-19. F-4991 a-Side PLAY & DUBBING Amp. Board (Stock No. 00884901)

Component Side



Pattern Side <Chip Parts>

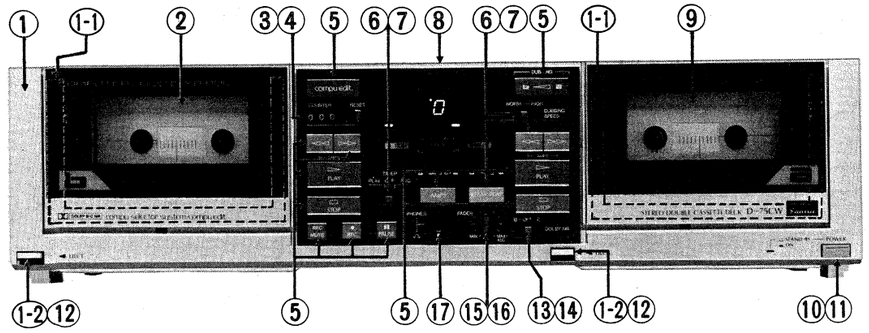


Parts List

Parts No.	Stock No.	Description
•Transistor		
vQ251	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
vQ252	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
vQ253	46367101	2SC2603
	or 46391901	2SC2785
	or 48058801	2SC1740S
•FET		
vFT251	46643800	2SJ103-Y
	or 46643801	2SJ103-GR
	or 46643802	2SJ103-BL
•IC		
vIC251	46673800	M5218P
vIC252	46673800	M5218P
vJW1	46741100	Cross Conductor (Chip)
vJW2	46741100	Cross Conductor (Chip)
vJW3	46741100	Cross Conductor (Chip)
vJW4	46741100	Cross Conductor (Chip)
vJW5	46741100	Cross Conductor (Chip)
vJW6	46741100	Cross Conductor (Chip)
vJW7	46741100	Cross Conductor (Chip)
vJW8	46741100	Cross Conductor (Chip)
vJW9	46741100	Cross Conductor (Chip)
vJW10	46741100	Cross Conductor (Chip)
vJW11	46741100	Cross Conductor (Chip)
vJW12	46741100	Cross Conductor (Chip)
vJW13	46741100	Cross Conductor (Chip)
vJW14	46741100	Cross Conductor (Chip)
vJW15	46741100	Cross Conductor (Chip)
vJW16	46741100	Cross Conductor (Chip)
vJW17	46741100	Cross Conductor (Chip)
vR251	46742800	10Ω 1/8W Chip R.
vR253	46752600	120kΩ 1/8W Chip R.
vR254	46748400	2.2kΩ 1/8W Chip R.
vR255	46746600	390Ω 1/8W Chip R.
vR256	46746200	270Ω 1/8W Chip R.
vR257	46753200	220kΩ 1/8W Chip R.
vR258	46750000	10kΩ 1/8W Chip R.
vR259	46747600	1kΩ 1/8W Chip R.
vR260	46752400	100kΩ 1/8W Chip R.
vR261	46749400	5.6kΩ 1/8W Chip R.
vR262	46751800	56kΩ 1/8W Chip R.
vR263	46746800	470Ω 1/8W Chip R.
vR264	46752400	100kΩ 1/8W Chip R.
vR265	46750800	22kΩ 1/8W Chip R.
vR266	46750800	22kΩ 1/8W Chip R.
vR267	46754000	470kΩ 1/8W Chip R.
vR268	46752400	100kΩ 1/8W Chip R.
vR269	46749200	4.7kΩ 1/8W Chip R.
vR270	46750800	22kΩ 1/8W Chip R.
vR271	46747600	1kΩ 1/8W Chip R.
vR281	46750000	10kΩ 1/8W Chip R.
vR282	46750000	10kΩ 1/8W Chip R.
vR283	46751800	56kΩ 1/8W Chip R.
vR284	46750000	10kΩ 1/8W Chip R.
vR285	46750000	10kΩ 1/8W Chip R.
vR286	46752000	68kΩ 1/8W Chip R.
vVR251	48078400	470Ω S.V.R., PLAY Level Adj.
	or 48199200	500Ω (B) S.V.R., PLAY Level Adj.

7. OTHER PARTS

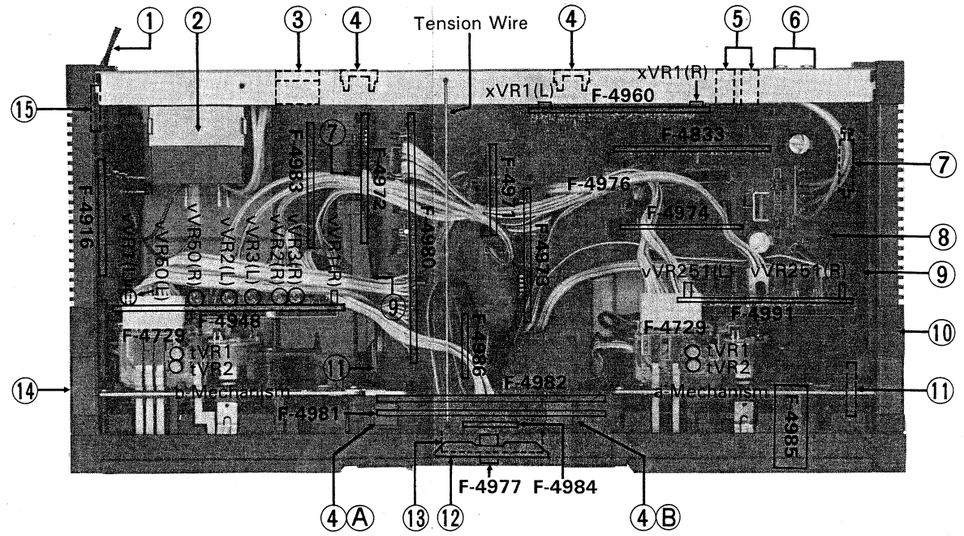
7-1. Front View



Parts List <Front View>

Parts No.	Stock No.	Description
1	47841800	Front Panel Ass'y for Silver Model
	47841900	Front Panel Ass'y for Black Model
1-1	47678700	Cassette Holder Ass'y
1-2	47776110	EJECT Knob for Silver Model
	47776200	EJECT Knob for Black Model
2	47864200	b-Side Cassette Lid Ass'y for Silver Model
	47864300	b-Side Cassette Lid Ass'y for Black Model
3	48192200	Tape Counter
4	47843300	Counter Belt
5	46396700	Push SW., PLAY•◁◁•▷▷•STOP Compu Edit etc
6	47799800	Slide Knob, TIMER•DUBBING SPEED
7	46178400	Slide SW., TIMER•DUBBIING SPEED
8	47823500	Bonnet for Silver Model
	47874700	Bonnet for Black Model
9	47864000	a-Side Cassette Lid Ass'y for Silver Model
	47864100	a-Side Cassette Lid Ass'y for Black Model
10	47747000	Push Knob, POWER for Silver Model
	47747100	Push Knob, POWER for Black Model
⚠11	48172700	Push SW., POWER
12	47673000	Spring, EJECT
13	47800700	Slide Knob, DOLBY NR
14	48126800	Slide SW., DOLBY NR
15	47742300	Knob, FADER
16	48201700	50kΩ (B) V.R., FADER
17	46265700	Jack, PHONES

7-2. Top View



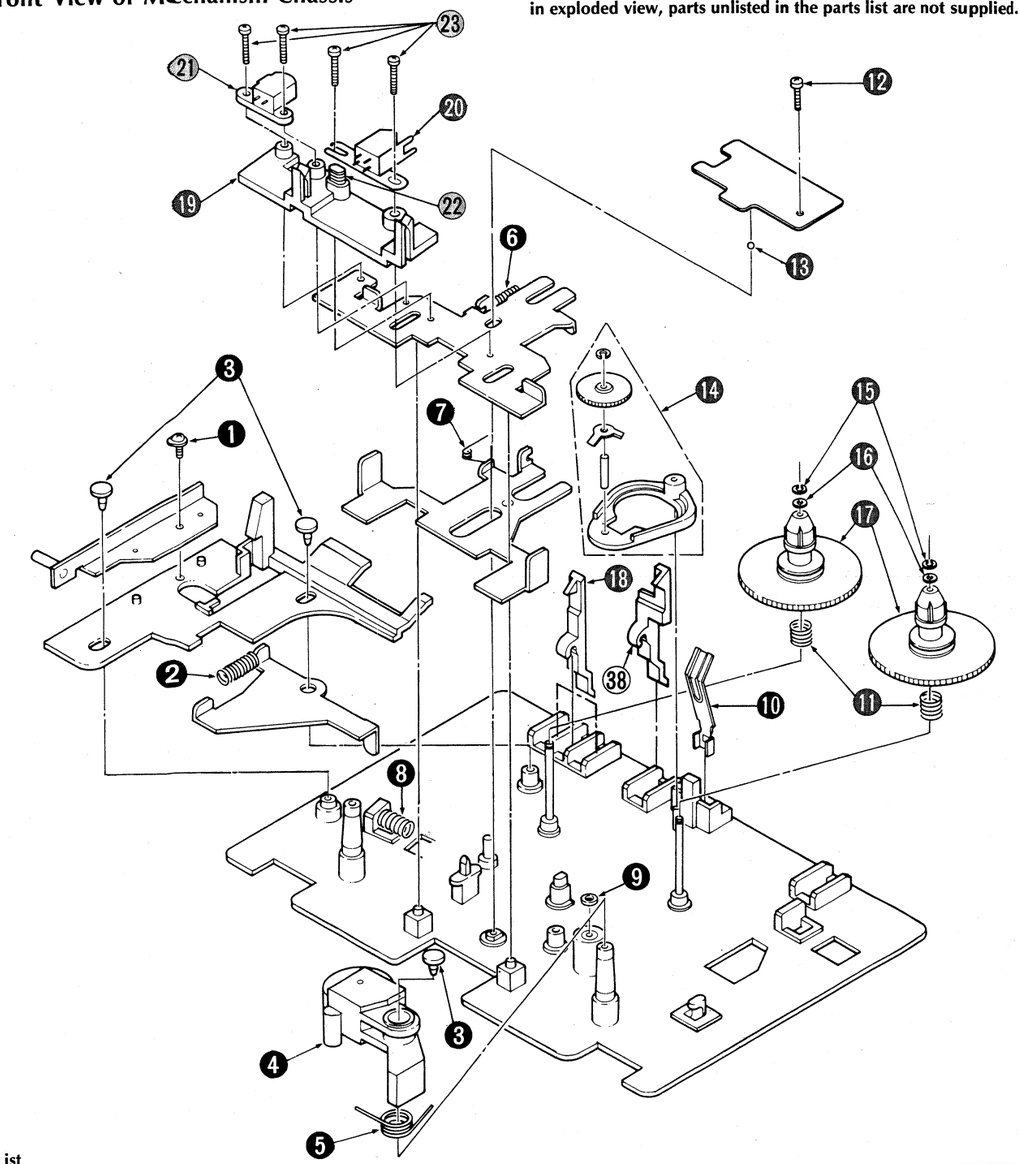
Parts List <Top View>

Parts No.	Stock No.	Description
⚠ 1	38005400	Power Supply Cord <XX•XX-V•CSA>
⚠	38004700	Power Supply Cord <UL>
⚠	38004500	Power Supply Cord <EU>
⚠	38004300	Power Supply Cord <BS>
⚠	07204200	Power Supply Cord <AS>
⚠ 2	15020501	Power Transformer <XX>
⚠	15020502	Power Transformer <UL•CSA>
⚠	15020505	Power Transformer <EU•BS•AS>
⚠	15020509	Power Transformer with VOLTAGE SELECTOR Socket <XX-V>
⚠ 3	48175200	Plug, VOLTAGE SELECTOR <XX-V>
⚠	07204700	Slide SW., VOLTAGE SELECTOR <EU•BS>
4	47252300	P.C.B Holder
5	46547200	Jack, COMPU SELECTOR•COMPU EDIT
6	46371500	4P Terminal Board, LINE IN•LINE OUT
7	48126700	Damper Ass'y
8	47839600	Joint Shaft, POWER
9	47685310	Damper Holder
10	47768710	Right Side Panel for Silver Model
	47874810	Right Side Panel for Black Model
11	47628500	Joint Shaft, Damper Ass'y
12	47844700	Display Plate
13	47844400	Illumination Plate
14	47768800	Left Side Panel for Silver Model
	47874900	Left Side Panel for Black Model
15	47157300	Power Supply Cord Cover

8. EXPLODED VIEW OF MECHANISM ASS'Y & PARTS LIST

8-1. Front View of Mechanism Chassis

• Though every part included in mechanism ass'y is numbered in exploded view, parts unlisted in the parts list are not supplied.

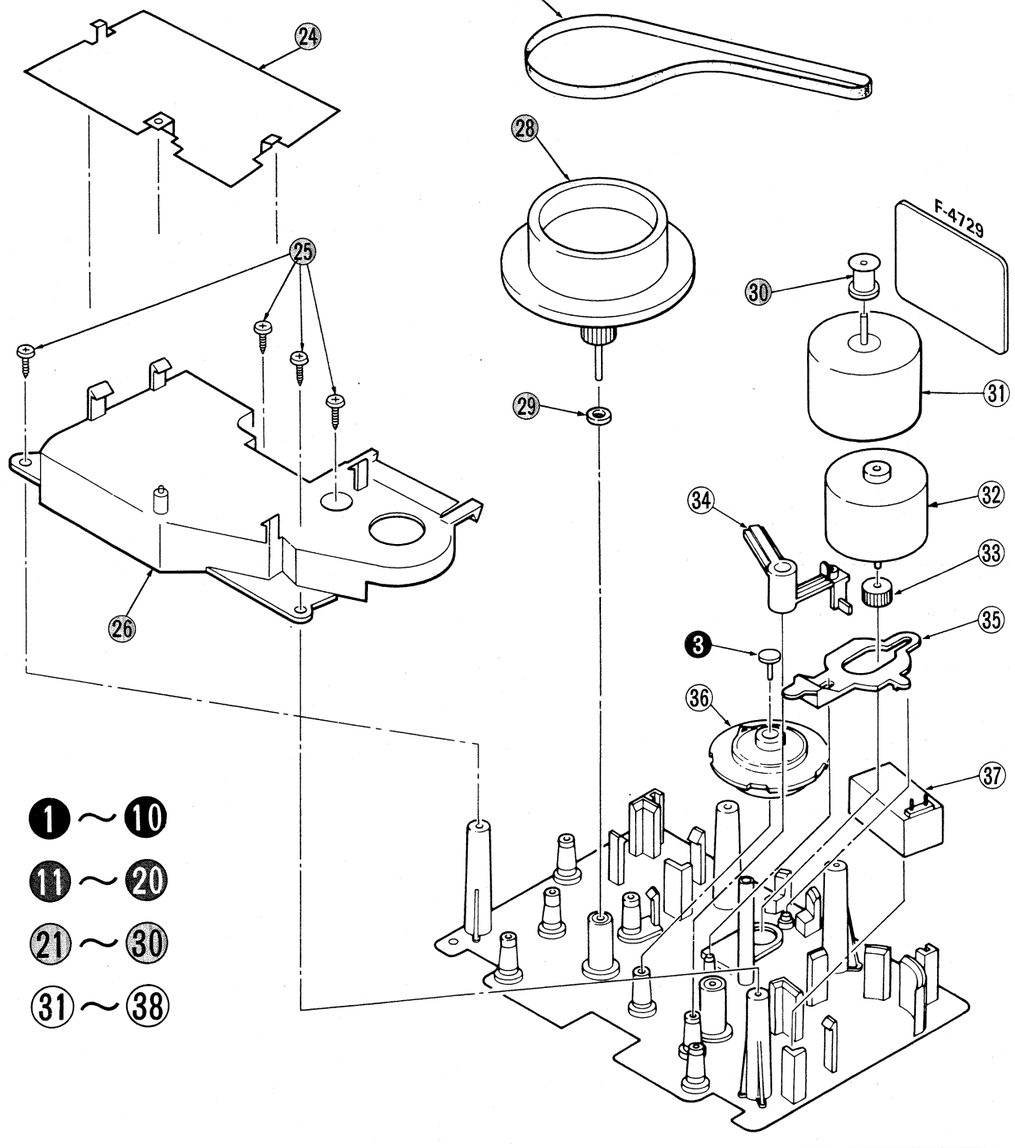


Parts List

Parts No.	Stock No.	Description
1	46267900	Tapping Screw, M3.0×8
2	47644500	Spring, eject
3	47420900	Plastic Tack
4	47281810	Pinch Roller Ass'y
5	47483100	Spring, pinch roller
6	47406200	Spring, head base
7	47405600	Spring, slide base
8	47668600	Spring, plunger solenoid
9	47404700	Washer, d=2.5
10	47293510	Spring, half

Parts No.	Stock No.	Description
11	47709610	Spring, reel
12	13127800	Tapping Screw, M2×12
13	47404900	Steel Ball, ϕ2.0
14	47405000	Arm Ass'y
15	47404800	Washer, d=1.6
16	47497100	Washer, d=2.0
17	47835500	Reel Gear Ass'y
18	47723010	Sensor Arm (A)
19	47284110	Head Base
20	46920300	REC/PB Head

8-2. Rear View of Mechanism Chassis



Parts No.	Stock No.	Description
21	07997400	Erase Head <b-Mechanism>
	46867800	Dummy Head <a-Mechanism>
22	47406100	Spring azimuth
23	00420900	Binding Head Screw, M2×12
24	———	Shield Plate
25	46267800	Pan Head Tapping Screw, M3×8
26	47658030	Sub Chassis
27	47405200	Belt
28	47598100	Flywheel Ass'y
29	47404600	Washer, d=2.5

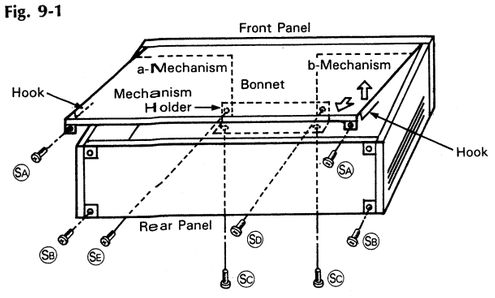
Parts No.	Stock No.	Description
30	47283100	Pully
31	46737600	Capstan Motor
32	46737500	Reel Motor
33	47293110	Gear, reel motor
34	47281610	Lock Arm
35	47293810	Arm (B)
36	47283830	Assist Gear
37	47292610	Plunger Solenoid
38	47292520	Sensor Arm B <b-Mechanism>

9. MAIN PARTS REPLACEMENT

A. Bonnet (See Fig- 9-1)

1) Remove two screws (SA).
2) Pull the rear side of the bonnet remove the hooks and then remove bonnet.

Fig. 9-1

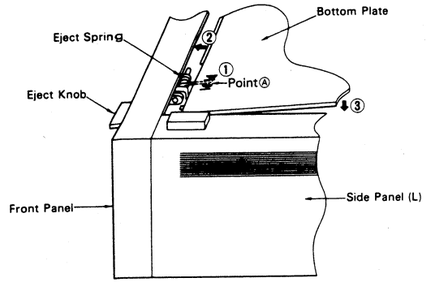


B. Bottom Plate

1) Remove four screws (Sb) (Sc). (See Fig. 9-1)
2) Pull the rear side of the bonnet and then remove it.

Note: Install the bottom plate after matching eject spring with point (A) of bottom plate. (See Fig. 9-2)

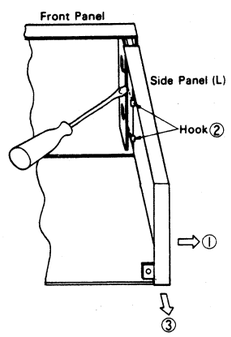
Fig. 9-2



C. Side Panel L (R) (See Fig. 9-3)

1) Remove bonnet and bottom plate.
2) Shift the position of the side panel L (R) 2.0cm in the arrow direction (1).
3) Remove the hooks (2) of the side panel from fornt panel and then pull it the arrow direction (3) to remove the side panel L (R).

Fig. 9-3



D. a-Side Mechanism Ass'y

1) Remove the bonnet and bottom plate.
2) Pluck out two connectors from F-4991 board.
3) Extract one connector from the F-4729 board.
4) Remove the side panel R.
5) Remove the joint shaft from the groove of the damper holder. (See G. Damper Ass'y)
6) Loosen a screw (Sb) fixing Mechanism Holder. (See Fig. 9-1)
7) Press the EJECT knob to open the cassette holder.
8) Remove four screws fixing the mechanism ass'y.
9) Remove the mechanism ass'y.

E. b-Side Mechanism Ass'y

1) Remove the bonnet and the bottom plate.
2) Pluck out three connectors from F-4948 board.
3) Extract one connector from the F-4729 circuit board.
4) Remove the side panel L.
5) Remove the joint shaft from the groove of the damper holder. (See G. Damper Ass'y)
6) Lossen a screw (Sc) fixing Mechanism Holder. (See Fig. 9-1)
7) Pluck out P.C.B (A) Holder. (See 7-2. Top View on Page 18)
8) Press the EJECT knob to open the cassette holder.
9) Remove four screws fixing the mechanism ass'y.
10) Draw out the mechanism ass'y.

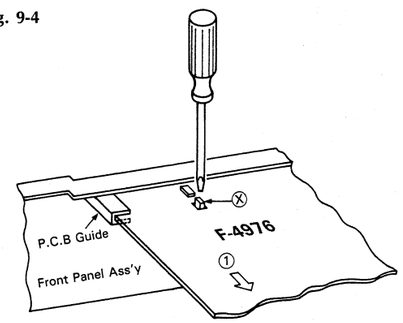
Note: To attach the mechanism ass'y, put the counter belt at the reel groove.

F. Front Panel Ass'y

1) Remove the bonnet and bottom plate.
2) Loosen two screws (Sc) and (Sb) fixing the mechanism holder.
3) Remove the side panel (L) and (R).
4) Remove tension wire.
5) Extract two P.C.B Holder (A) and (B). (See 7-2. Top View on Page 18)
6) Pluck out F-4985 circuit board from front panel ass'y.
7) Remove FADER VOLUME knob.
8) Separate joit shaft (POWER) from power sw. on F-4976.
9) Push hook (X) of front panel ass'y and pull F-4976 circuit board arrow direction (1) to remove it. (See Fig. 9-4)
10) Remove the mechanism ass'y and tape counter.

Note: As for precautions to be observed at the time of mounting, when mounting F-4976 circuit board, insert the circuit board into P.C.B guide and then push the hook (X).

Fig. 9-4



G. Damper Ass'y

1) Hold the damper holder to fix it, and push the damper ass'y to the arrow direction as Fig. 9-5, so that the damper ass'y is removed from the damper holder. (See Fig. 9-5)
2) Pinch the joint portion of the joint shaft and the damper ass'y, and remove the joint shaft from the groove of the damper holder after a little twist to the left. (See Fig. 9-6)
3) Turn up the damper end, to set the slit of the damper ass'y to the projection of the joint shaft. Then pull out the damper ass'y from the joint shaft. (See Fig. 9-7)

Fig. 9-5

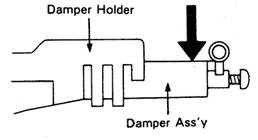


Fig. 9-6

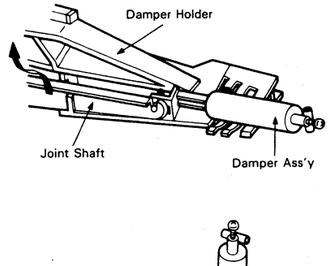
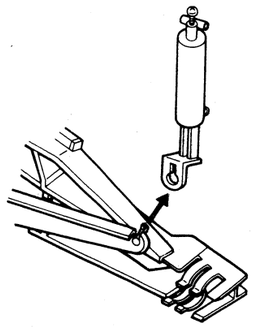


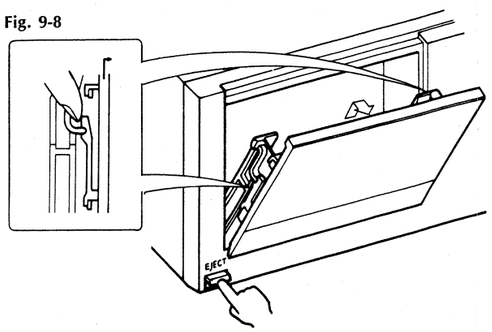
Fig. 9-7



H. Removement and Attachment of Lid Ass'y

Push EJECT Knob to open the cassette holder, push the parts locked at the left and right in the figure while pulling it upward, and remove the lid ass'y.

Fig. 9-8



I. Rec/PB Head (20)

1) Remove the mechanism ass'y from set.
2) Unsolder head read wires.
3) Loosen two screws.

J. Pinch Roller Ass'y (4)

1) Remove the mechanism ass'y from set.
2) Pull out the lock pin (3).
3) Take out the pinchroller ass'y.

K. Reel Gear Ass'y(17)

1) Remove the mechanism ass'y from set.
2) Take off two washer (15), (16) to pull out reel gear.

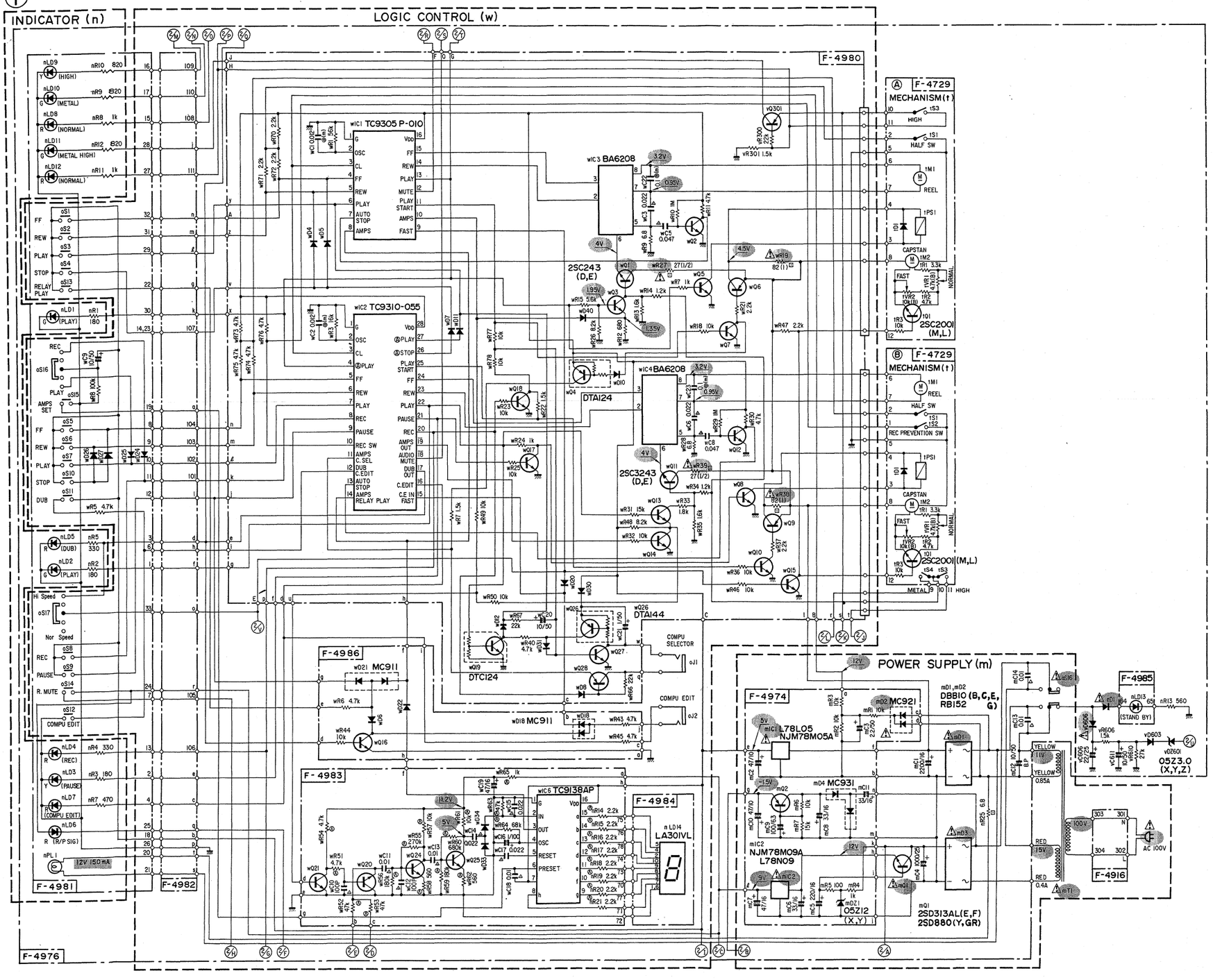
L. Capstan Motor (31), Reel Motor (32), Capstan Belt (27), Flywheel (28), Plunger Solenoid (37)

1) Remove the mechanism ass'y from set.
2) Extract connectors on the F-4948 <b-Side Mecha.> or F-4991 <a-Side Mecha.> circuit board.
3) Remove the F-4948 <b-Side Mecha.> or F-4991 <a-Side Mecha.> circuit board from the mechanism ass'y.
4) Take out shield plate (24).
5) Loosen four screws (25) fasting sub chassis (26).

10. SCHEMATIC DIAGRAM

10-1. Logic Control Section

* Design and specifications subject to change without notice for improvement.
* La présention et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



SYMBOL OF FUNCTION
(m) POWER SUPPLY
(n) INDICATOR
(o) SELECTOR
(p) FIXED PARTS
(t) MECHANISM
(v) REC/PLAY-AMP
(w) LOGIC CONTROL
(x) NOISE REDUCTION

SYMBOL
◉(P.P) Polypropylene
◉(m) Mylar
△ Ceramic
▲ Barrie Layer Capacitor
⊡ Non-inflammable Resistor
⊛ Chip Component (Cylindrical Type)
☑ Fusing Resistor

RESISTORS
Are in ohms, 1/4 Watts, ± 5% Tolerance
Unless Otherwise Noted. k: kΩ, M: MΩ

CAPACITORS
Are in μF, Unless Otherwise Noted. P: pF

Each D.C Voltage shows the nominal value in volts during dubbing recording

Electrolytic Capacitor : Capacitance(μF)/Volt(V)

CHIP RESISTORS are 1/8 Watts

⚠ is Safety Part
Use only replacement Parts recommended by the manufacturer.

PARTS NO.	TYPE NO.
wD4~8, I0~I2 20,22,24~27 30,3I nDI vD603,606 tDI	IS2473 IS1588
wD33,34	RLS-73
wQ2,3,7,I0 I2~2I, 24,25 27	2SC2603(E,F,G) 2SC2785(J,H,F,E) 2SCI740(R,S,E)
wQ4, 28 mQ2 vQ30I	2SAII15(E,F) 2SA933S(R,S,E) 2SAI175(J,H,F,E)
wQ5,8	2SC2001(M,L) 2SDI468S(R,S) 2SC3243(D,E)
wQ6,9	2SA952(M,L) 2SAI283(D,E)
nLDI,2,I0,II	TLG-123A SEL2410E GL-3EG7
nLD3,9	TLY-123 SEL29I0A GL-3HY57
nLD4~8,I2~I3	TLS-123 SEL22I0S GL-3HD7

2SA952 2SD313AL
2SA1283
2SC1845
2SC2001
2SC3243
2SC3244

2SA933S
2SA1175
2SA1115 2SC1740S
2SC2458 2SC2785
2SC2603 2SD1468S
DTA124
DTA144
DTC124

2SJ103

LN78N05
LN78N09

NJM78M05A
NJM78M09A

BA6208

μPD4066BC
BU4066B
CX-20187
LC4969
M51161P
M5218P
MSM4066BRS
TC9138AP
TC9305P-010
TC9310N-055

Dot or Slit or Line

RB152 RLS-73

MC921

DBB10-B

GL-3EG7
GL-3HD7
GL-3HY57
SEL2210
SEL2410
SEL2910
TLG-123
TLS-123
TLY-123

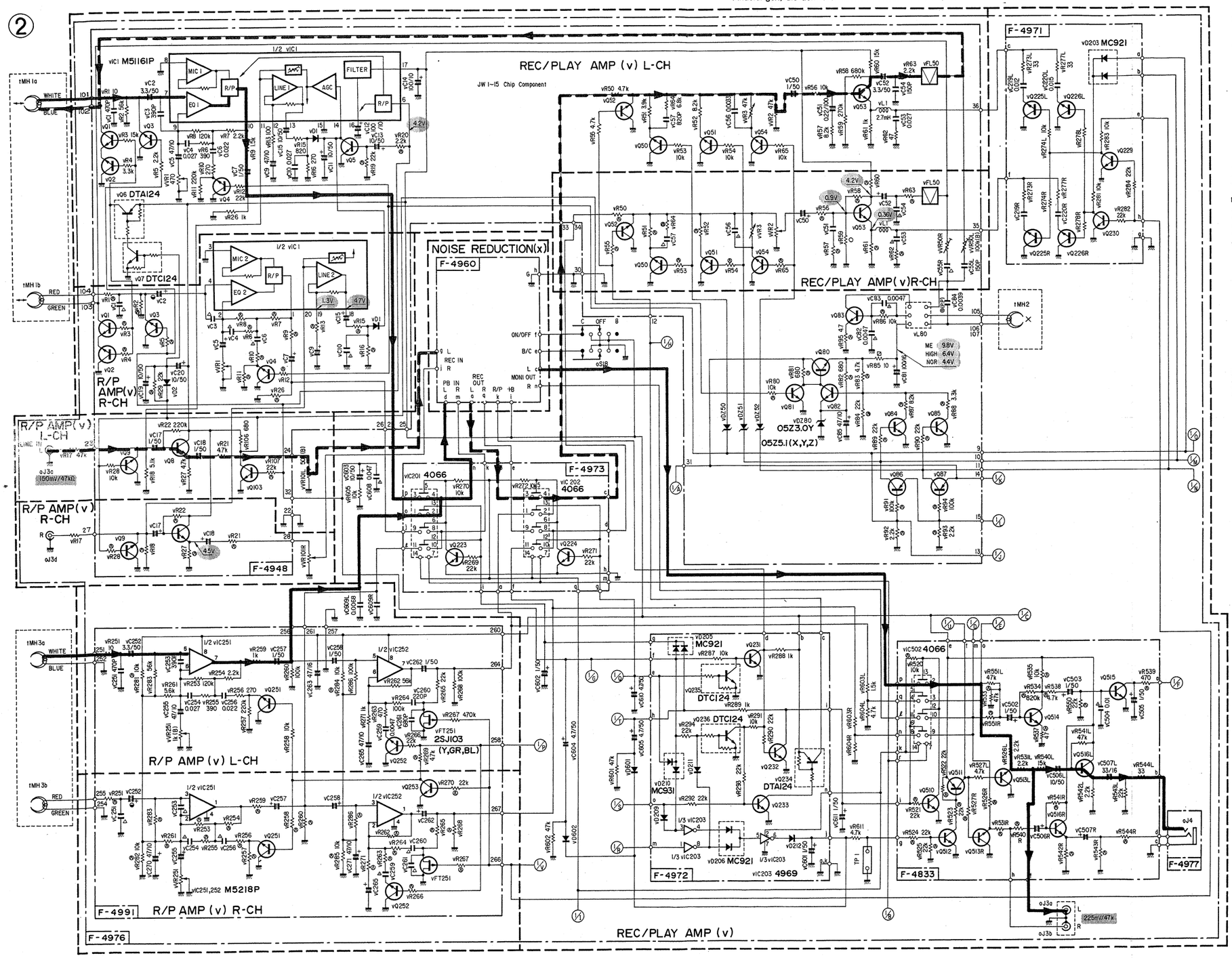
1S1588
1S2473
11DQ

05Z3.0
05Z5.1
05Z12

MC931

10-2. REC & PLAY Amplifier Section

* Design and specifications subject to change without notice for improvement.
* La présention et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



SYMBOL OF FUNCTION
(g) MIC AMP
(m) POWER SUPPLY
(o) SELECTOR
(p) FIXED PARTS
(t) MECHANISM
(v) REC/PLAY AMP
(w) LOGIC CONTROL
(x) NOISE REDUCTION

SYMBOL
△ Ceramic Capacitor
△ Barrier Layer Capacitor
Ⓜ(M) Mylar Capacitor
⊖ Low-Leak Electrolytic
BP Bi-Polar Electrolytic
□ Non-inflammable Resistor
⊕ Chip Component (Cylindrical Type)
⊠ Chip Component
⊠ Fusing Resistor
Ⓟ(PP) Polypropylene Film

RESISTORS
Are in ohms, 1/4 Watts, ± 5% Tolerance
Unless Otherwise Noted. k:kΩ, M:MΩ

CAPACITORS
Are in μF, Unless Otherwise Noted. P:pF

Electrolytic Capacitor
Capacitance(μF) / Volt (V)

CHIP RESISTORS
Are 1/8 Watts

Each D.C Voltage shows the nominal value in volts during recording

⚠ is Safety Part
Use only replacement parts recommended by the manufacturer.

PARTS NO.	TYPE NO.
v01,2	2SC1845(E,F)
v03	2SC2001(L,M) 2SD1468S(R,S)
v04,5,8,9,50~54 81,82,84,85,103 223~226,229~233 251~253,510 512~516	2SC2603(E,F) 2SC1740S(R,S,E) 2SC2458(Y,GR) 2SC2785(J,H,F,E)
v080	2SC3243(D,E)
v083	2SC3224(D,E) 2SC1627A(O,Y)
v086,87,511	2SA1115(E,F) 2SA933S(R,S,E) 2SA1175(J,H,F,E)
v01,2	RLS-73
vD209,211,212	1S2473 1S1588

2SA952 2SD313AL
2SA1283
2SC1845
2SC2001
2SC3243
2SC3244
2SA1115 2SA933S
2SC2458 2SA1175
2SC2603 2SC1740S
2SC2785
2SD1468S
DTA124
DTA144
DTC124
2SJ103
LN78N05
LN78N09
NJM78M05A
NJM78M09A
BA6208
μPD4066BC
BU4066B
CX-20187
LC4969
M51161P
M5218P
MSM4066BRS
TC9138AP
TC9305P-010
TC9310N-055
Dot or Slit or Line
RB152
RLS-73
MC921
DBB10-B
GL-3EG7
GL-3HD7
GL-3HY57
SEL2210
SEL2410
SEL2910
TLG-123
TLS-123
TLY-123
1S1588
1S2473
11DQ
05Z3.0
05Z5.1
05Z12
MC931

PLAY Signal Line
REC Signal Line

10-3. Noise Reduction Section

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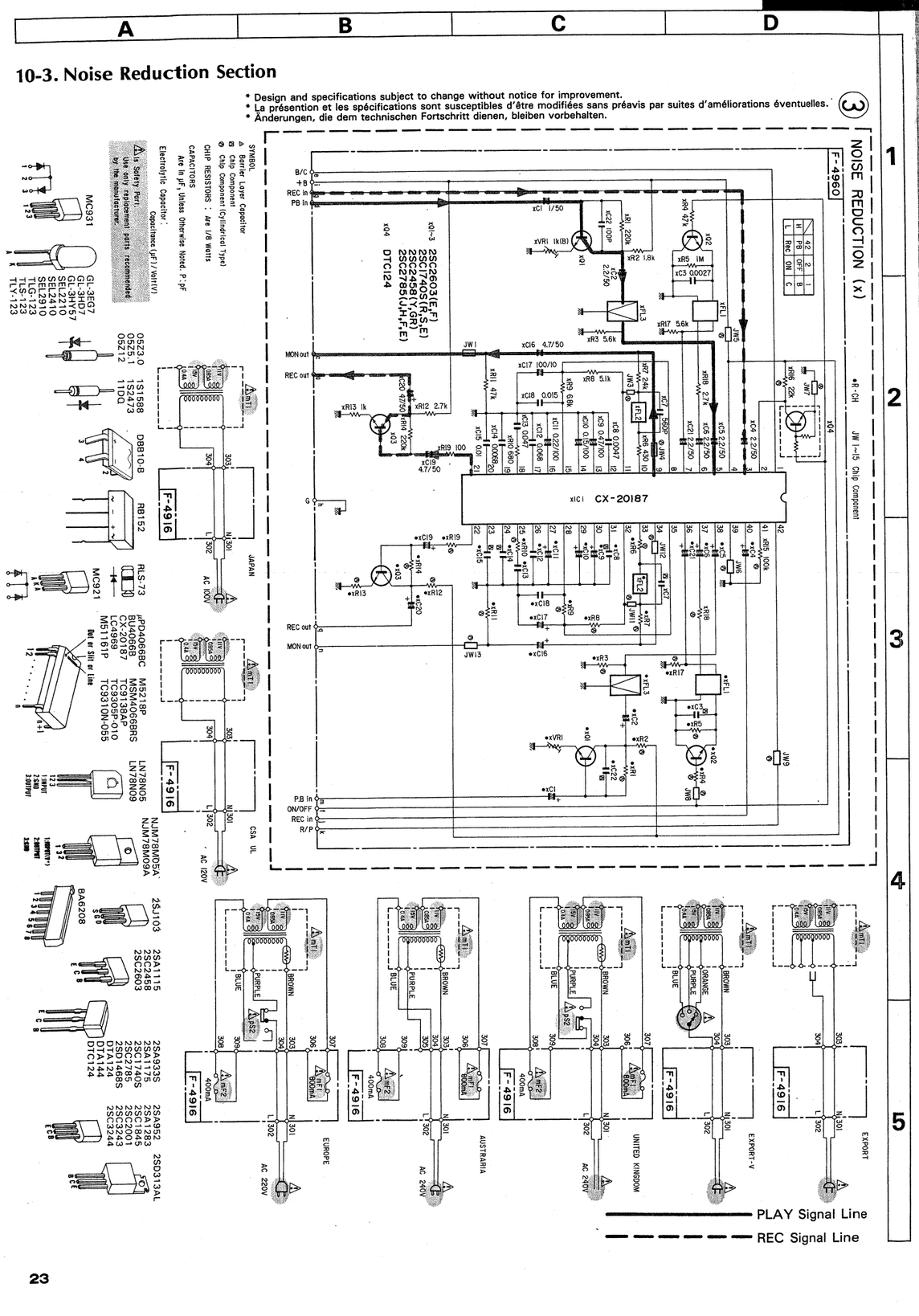
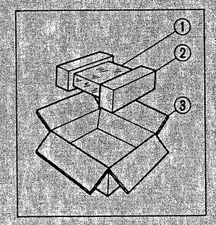
* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



11. PACKING LIST

Parts No.	Stock No.	Description
1	47859900	Vinyl Cover
2	47764600	Styrofoam Packing
3	47842400	Carton Case for Silver Model <XX·UL·CSA·EU·BS·AS>
	47842500	Carton Case for Black Model <XX·UL·CSA·EU·BS·AS>
	47842600	Carton Case for Silver Model <XX-V>
	47842700	Carton Case for Black Model <XX-V>



12. ACCESSORY LIST

Stock No.	Description
07193400	PJP Cord
or 38103300	PJP Cord
48181500	Mini Pin Plug Cord (COMPU EDIT)
48181300	Mini Pin Plug Cord (COMPU SELECTOR)
94300500	Head Cleaner
46968300	Operating Instruction (D-75BW/D-75CW)

•**Note:** XX-V <EXPORT (V)> Standard Version with Outer Voltage Selector.
("V" mark is indicated on the carton case.)

Sansui

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